

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

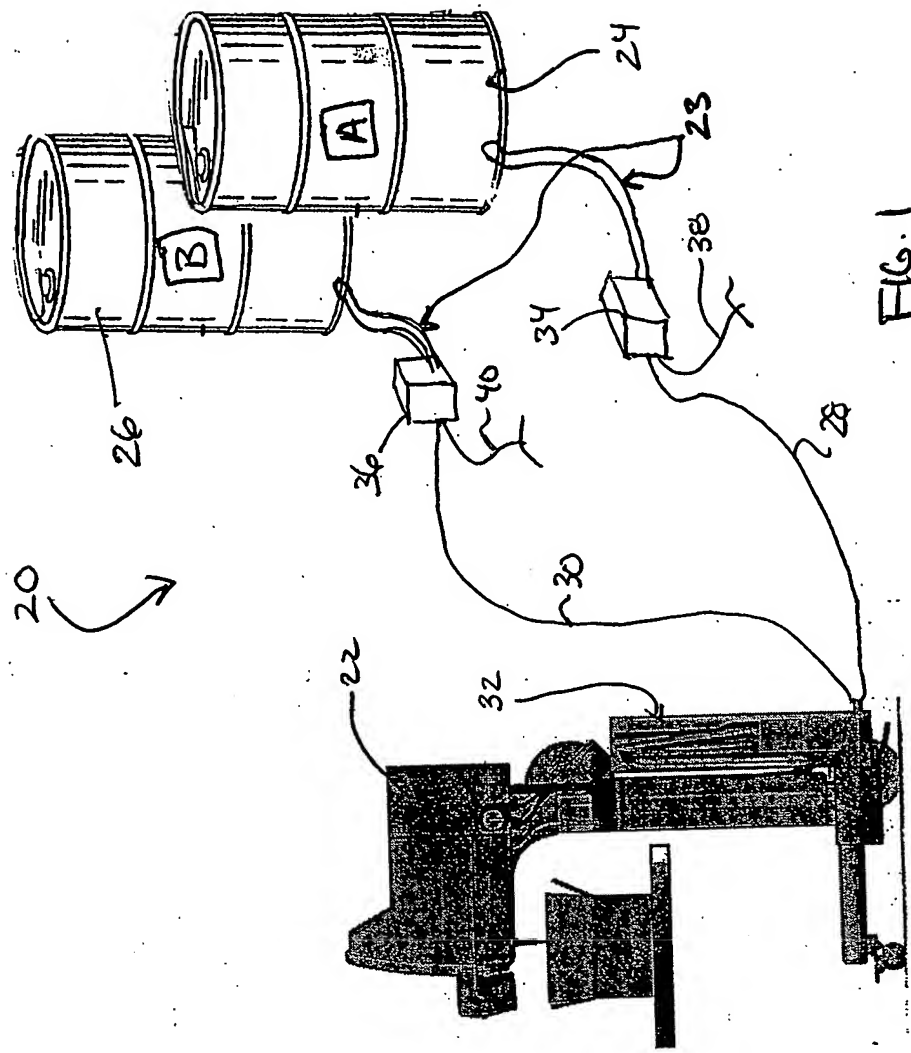
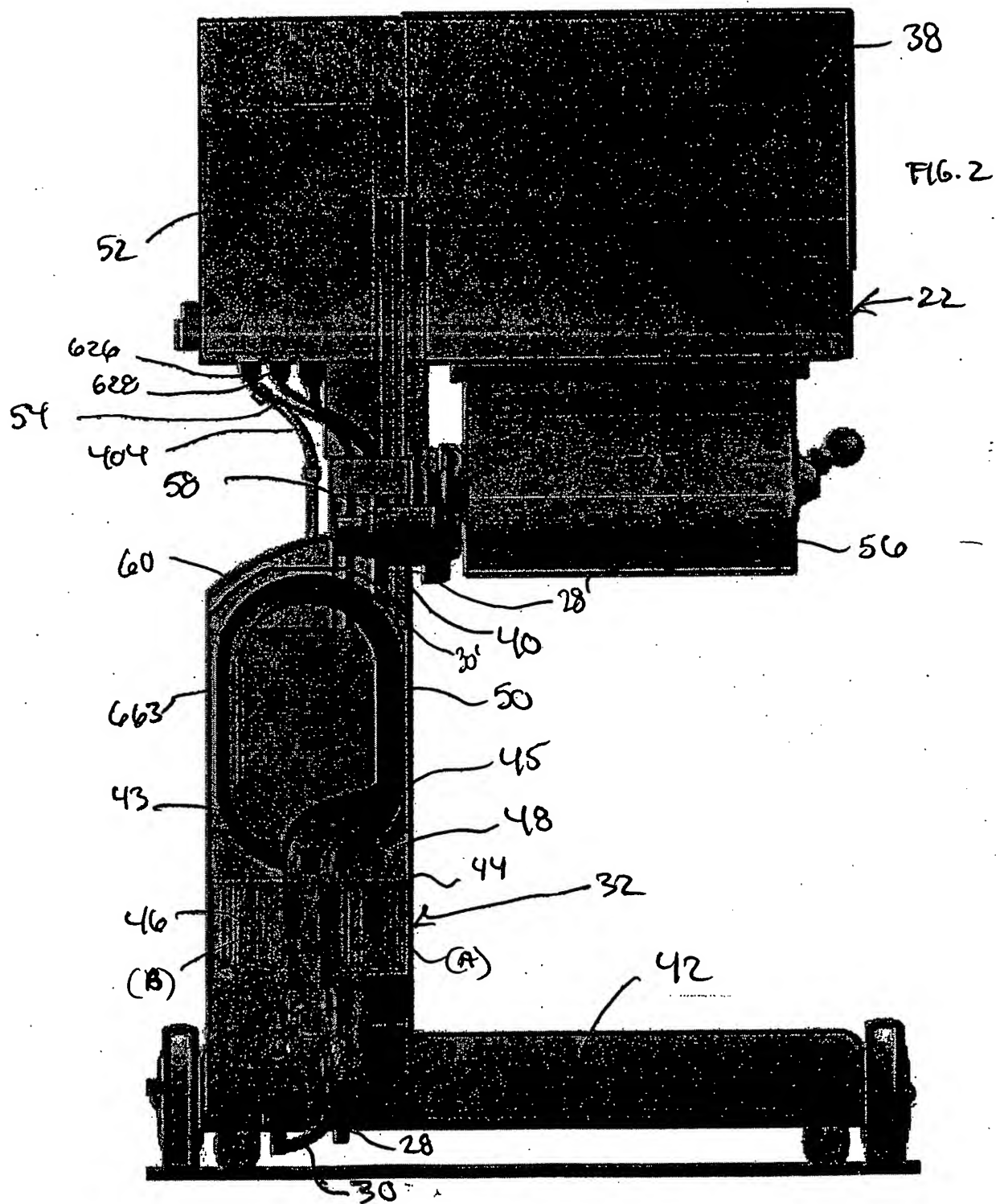


FIG. 1



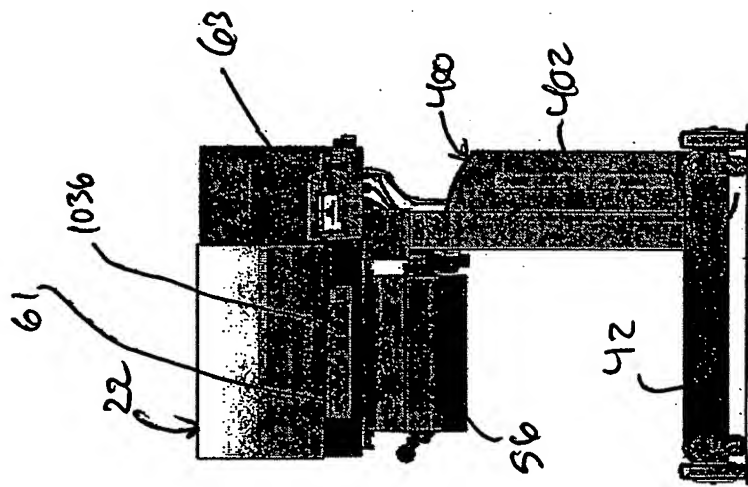
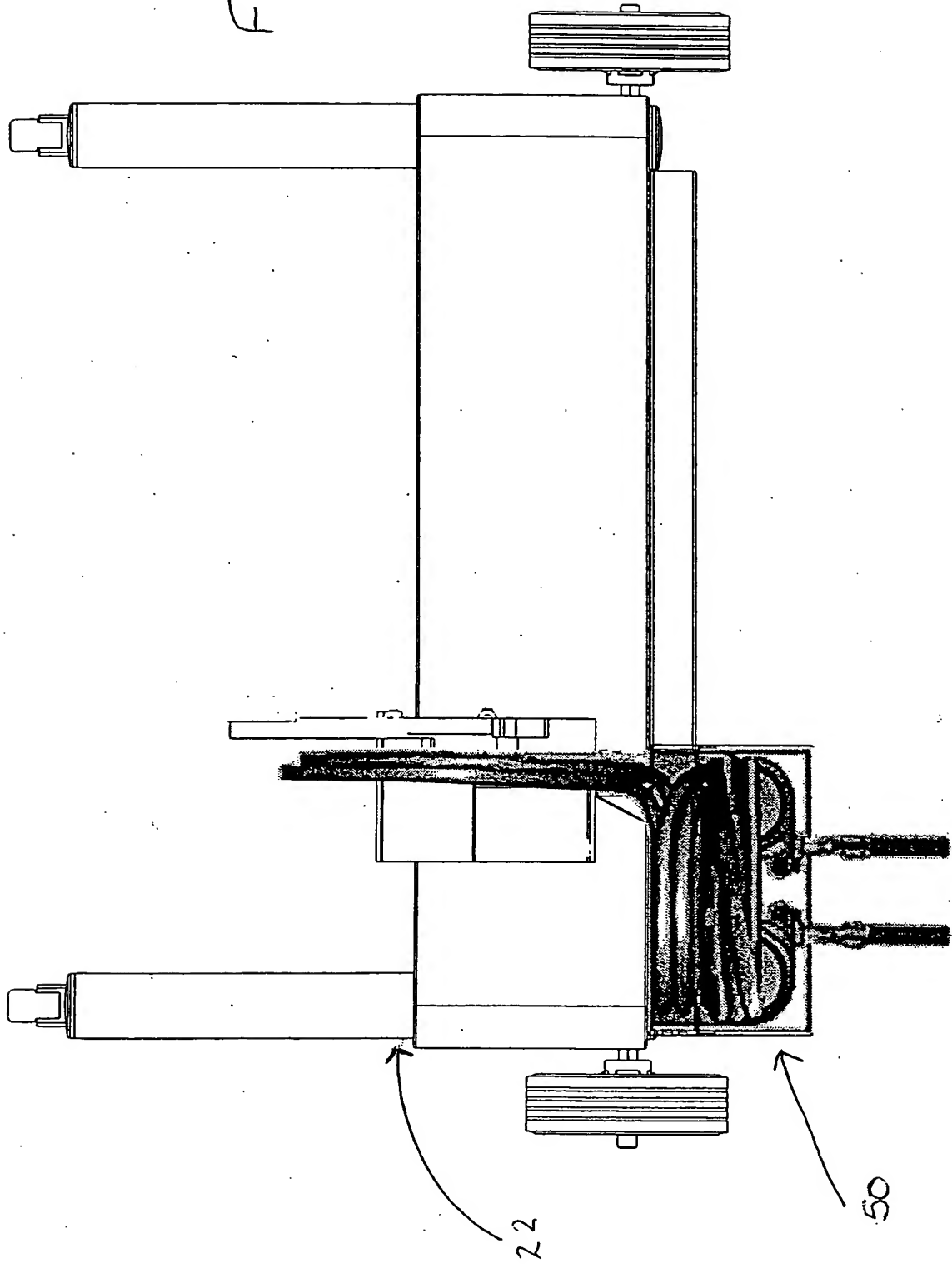


FIG. 3

FIG 4



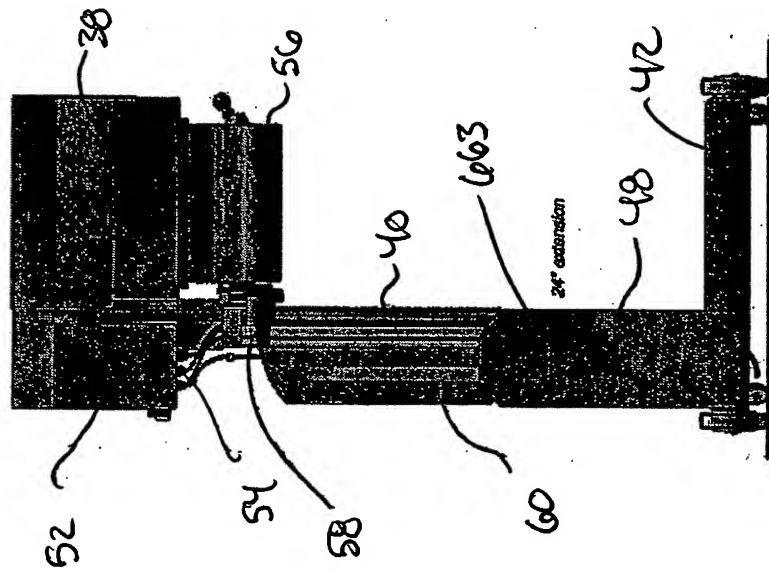


FIG. 5

FIG. 6

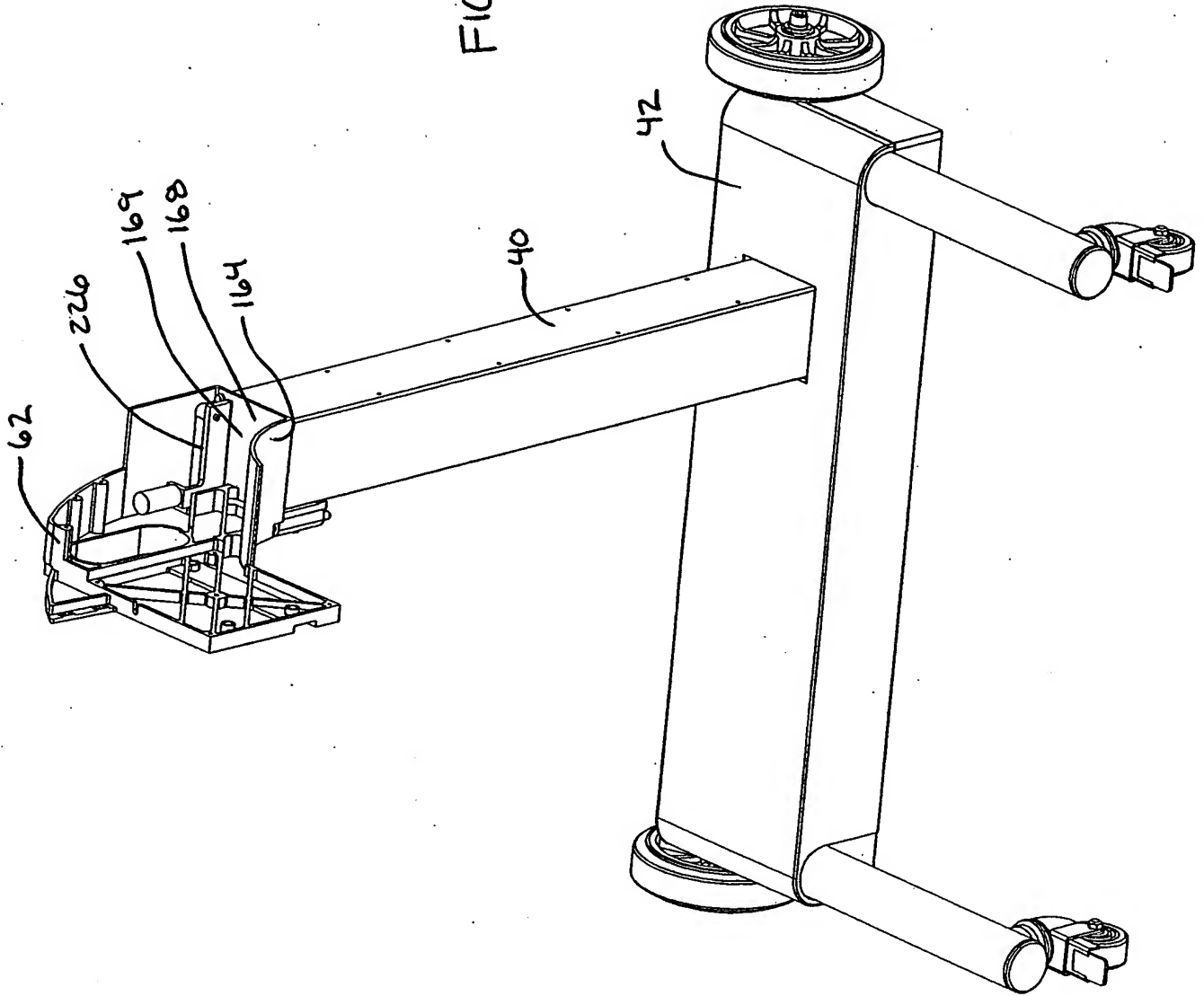


FIG. 7

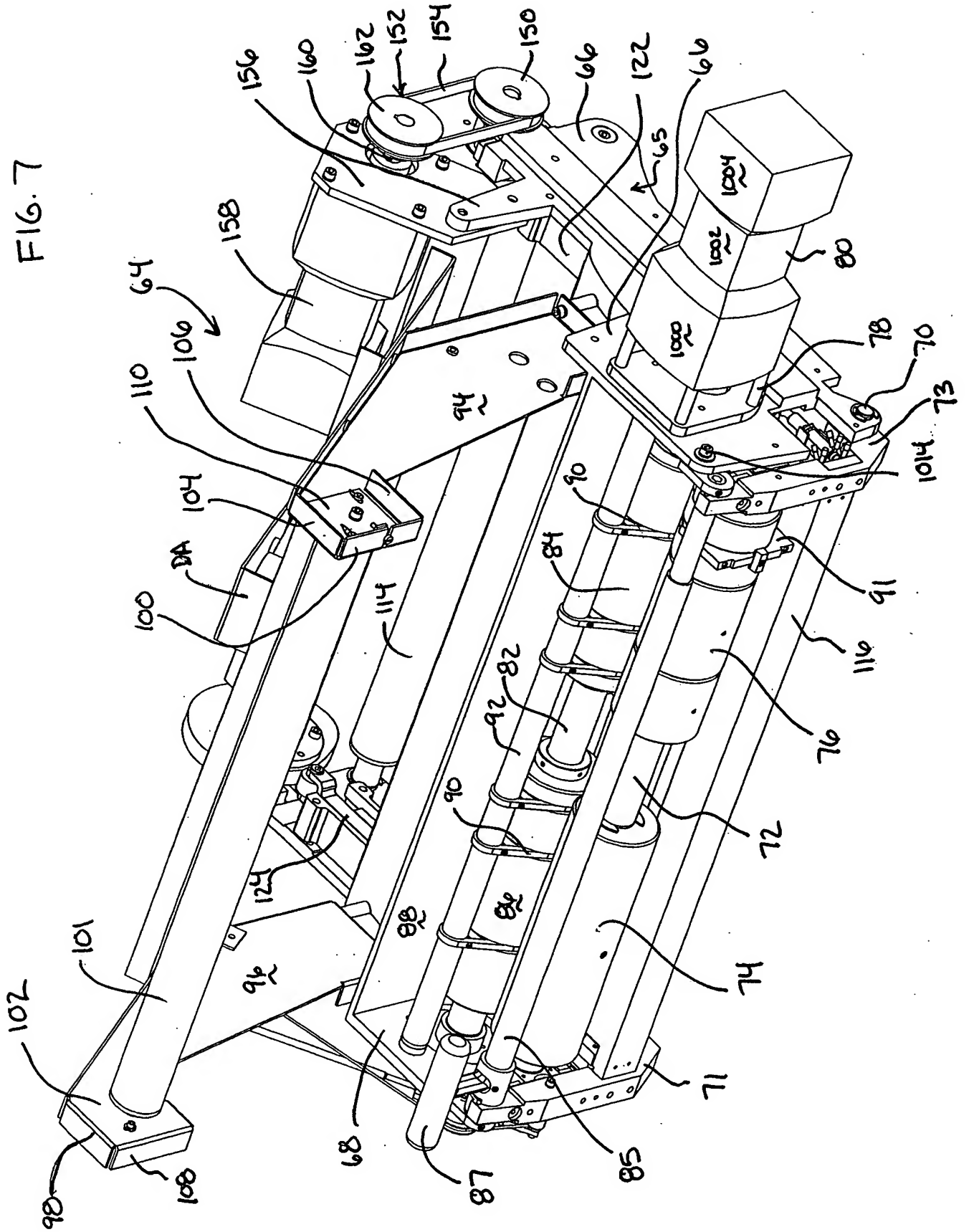
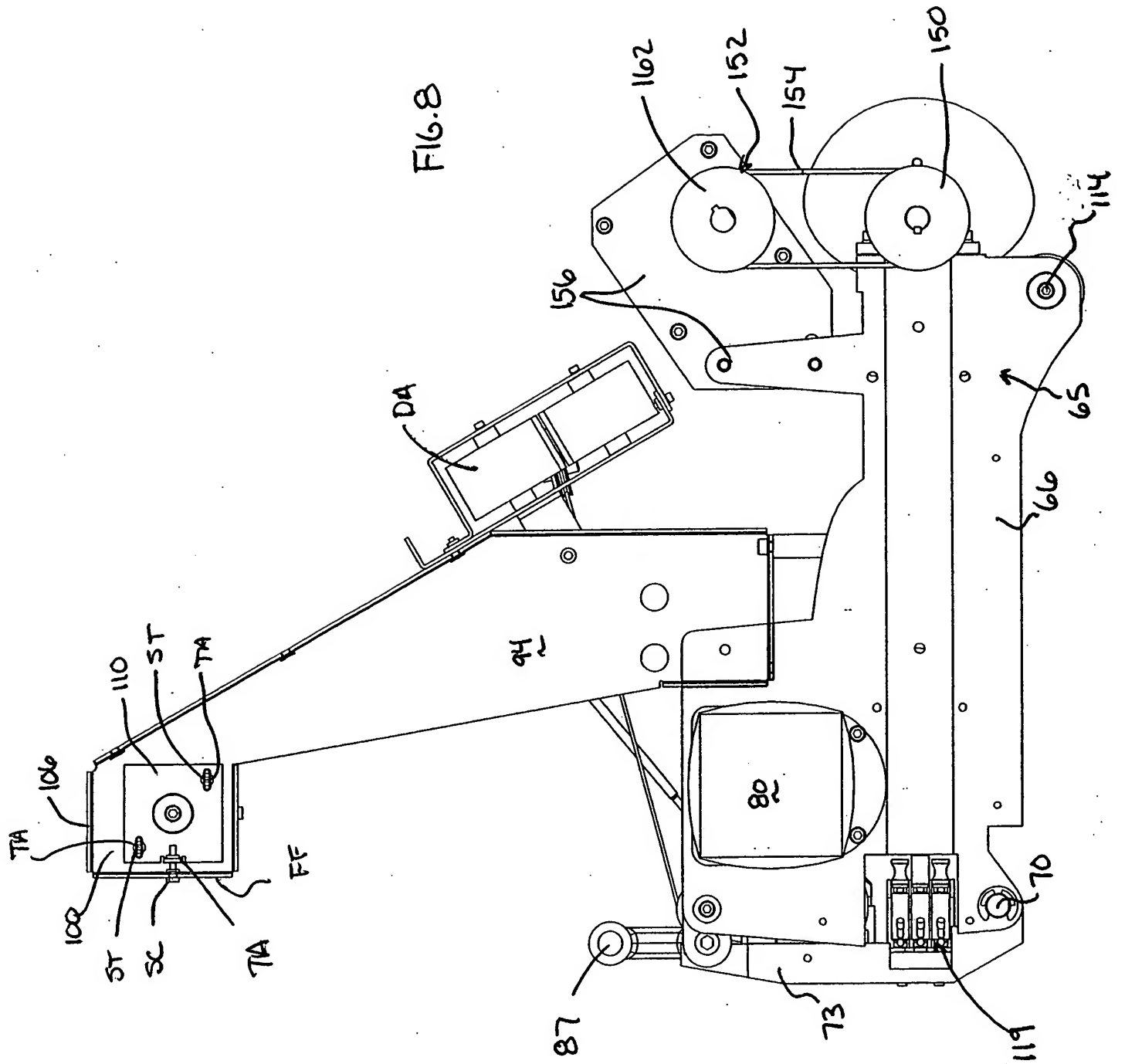
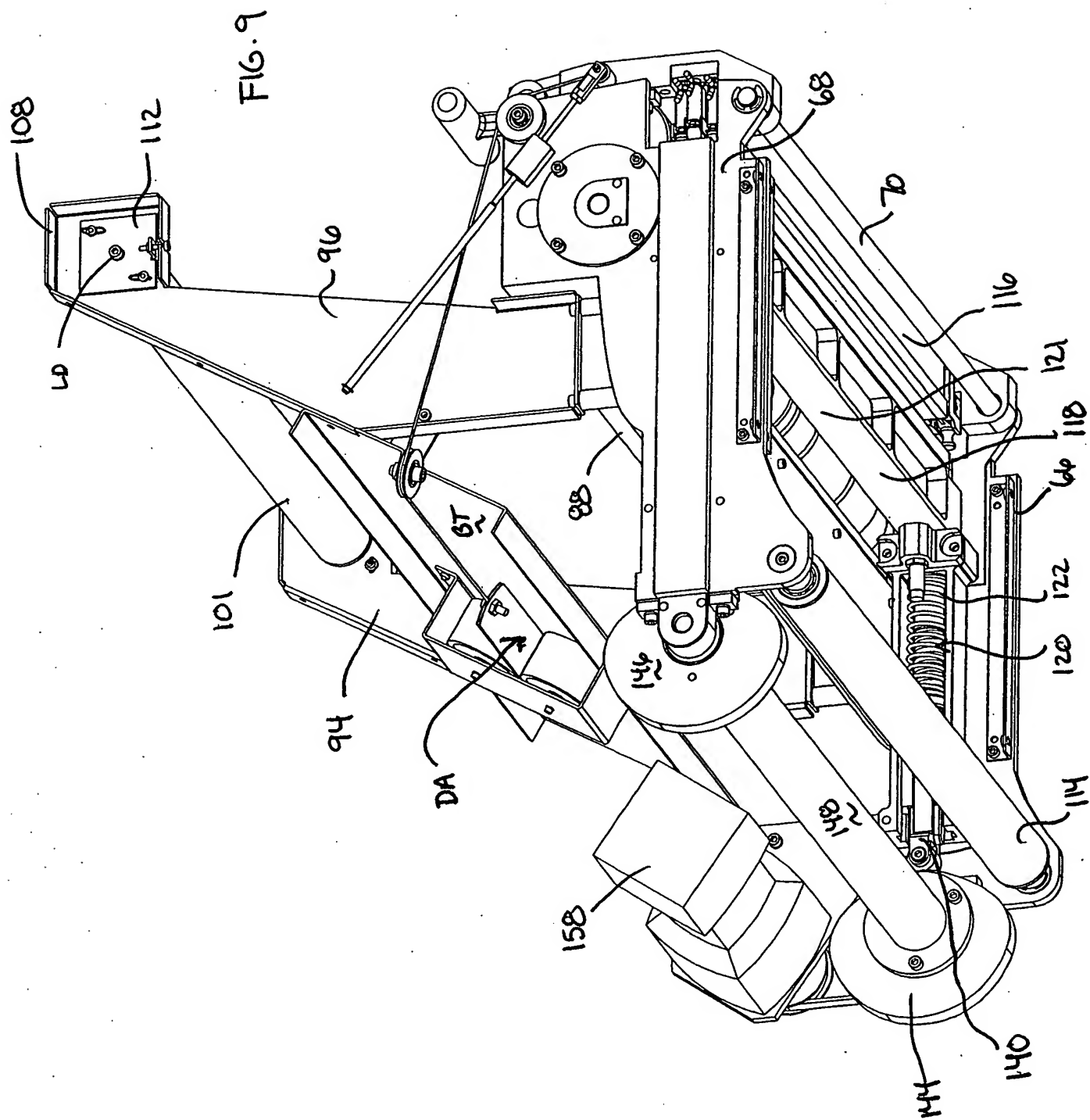


FIG. 8





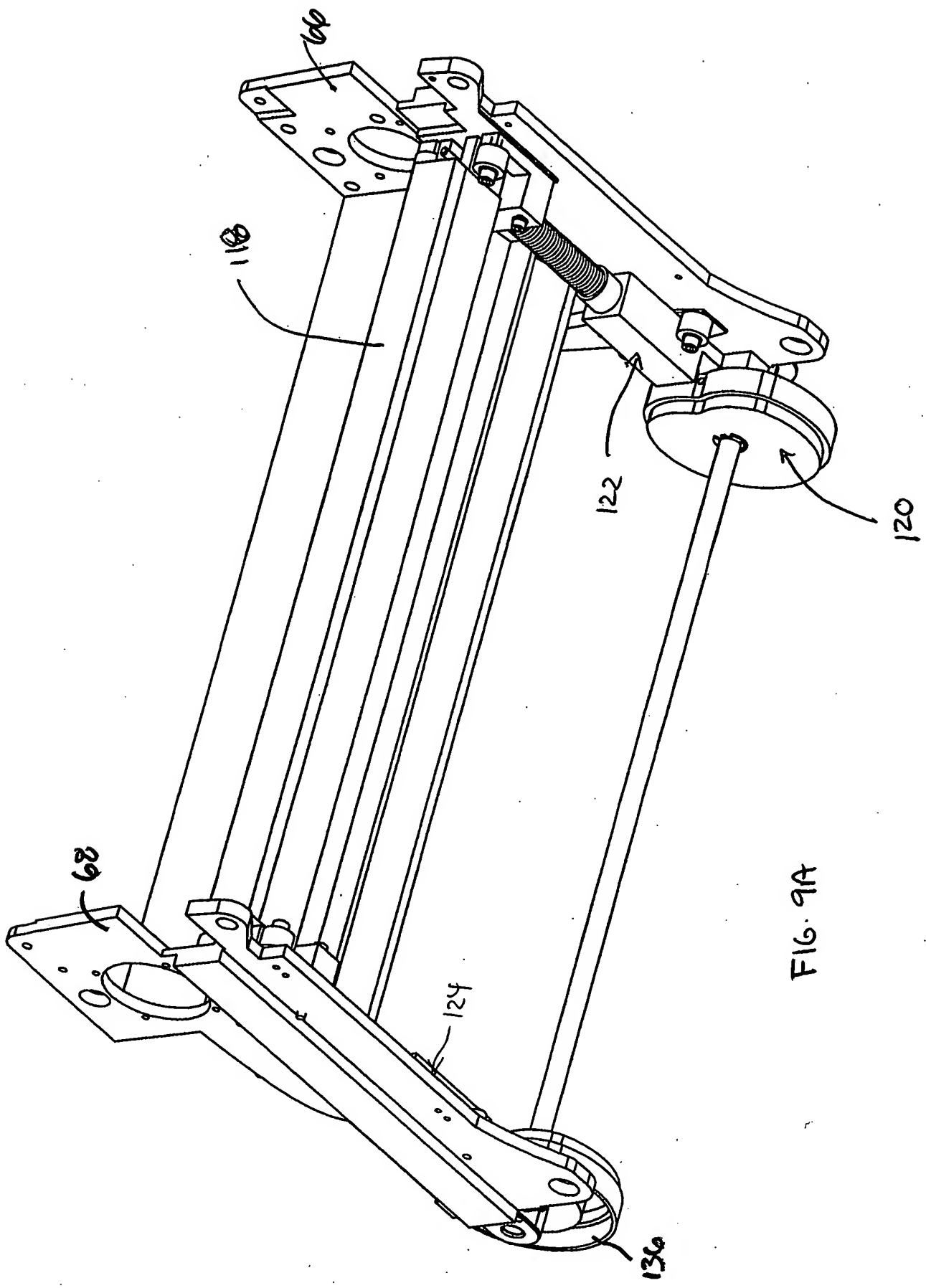


FIG. 9A

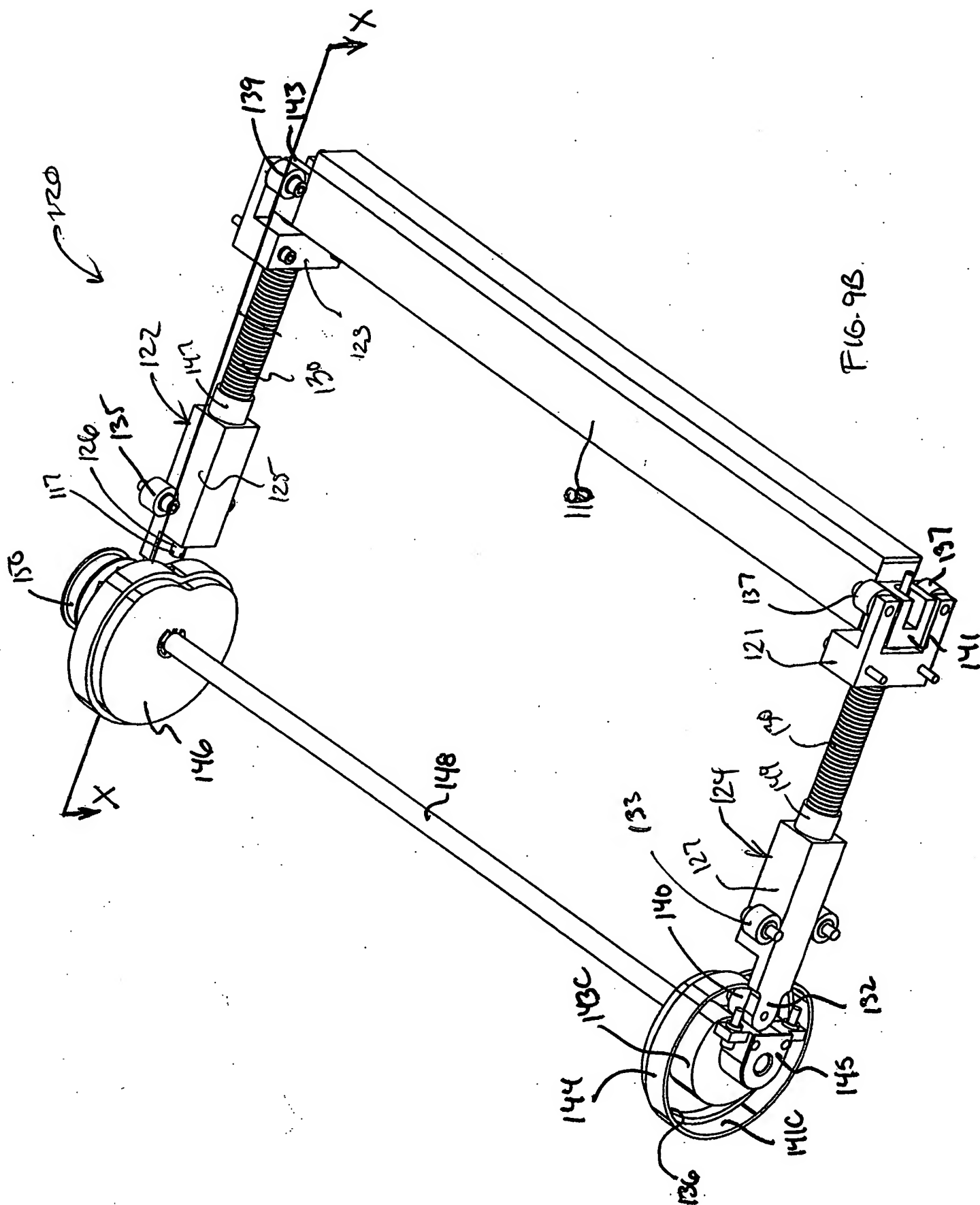


FIG. 9B

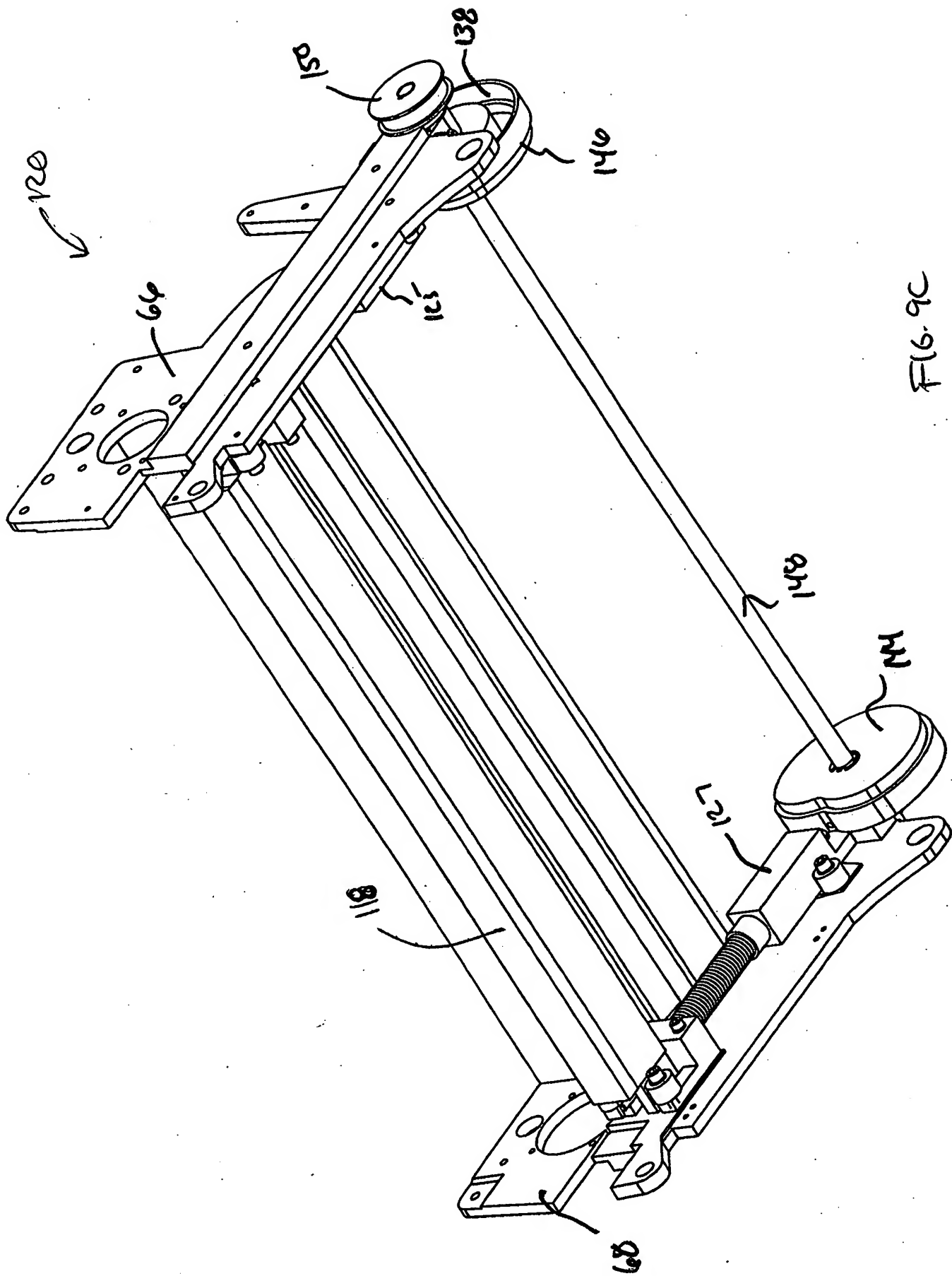


FIG. 9C

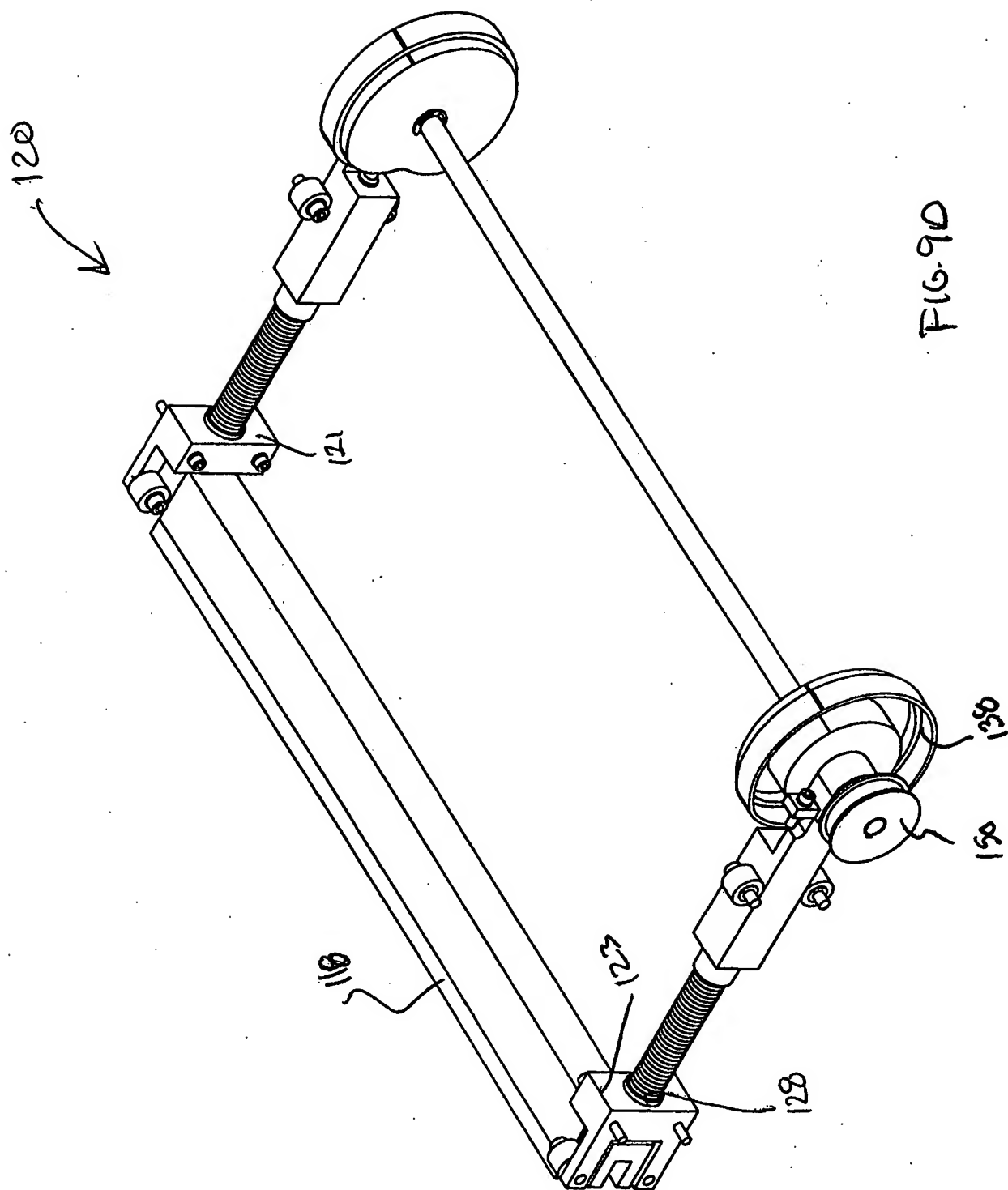
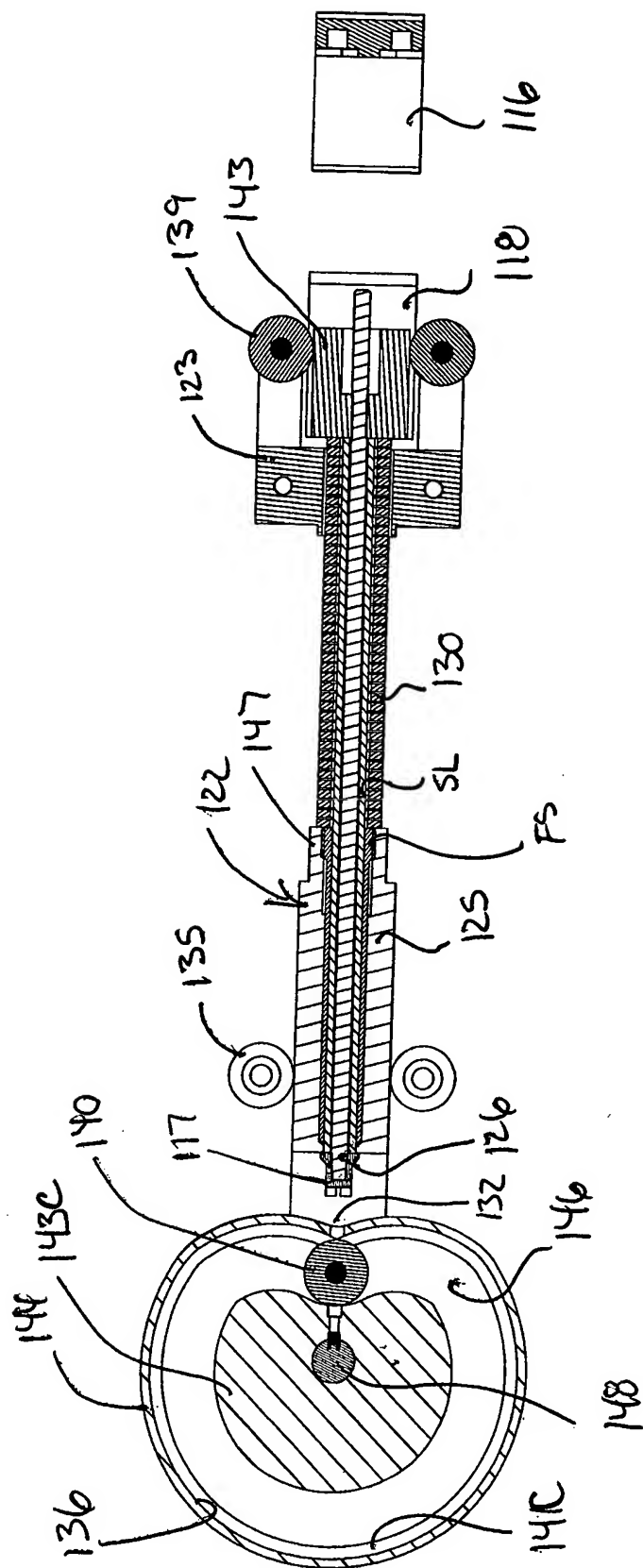


FIG. 9E



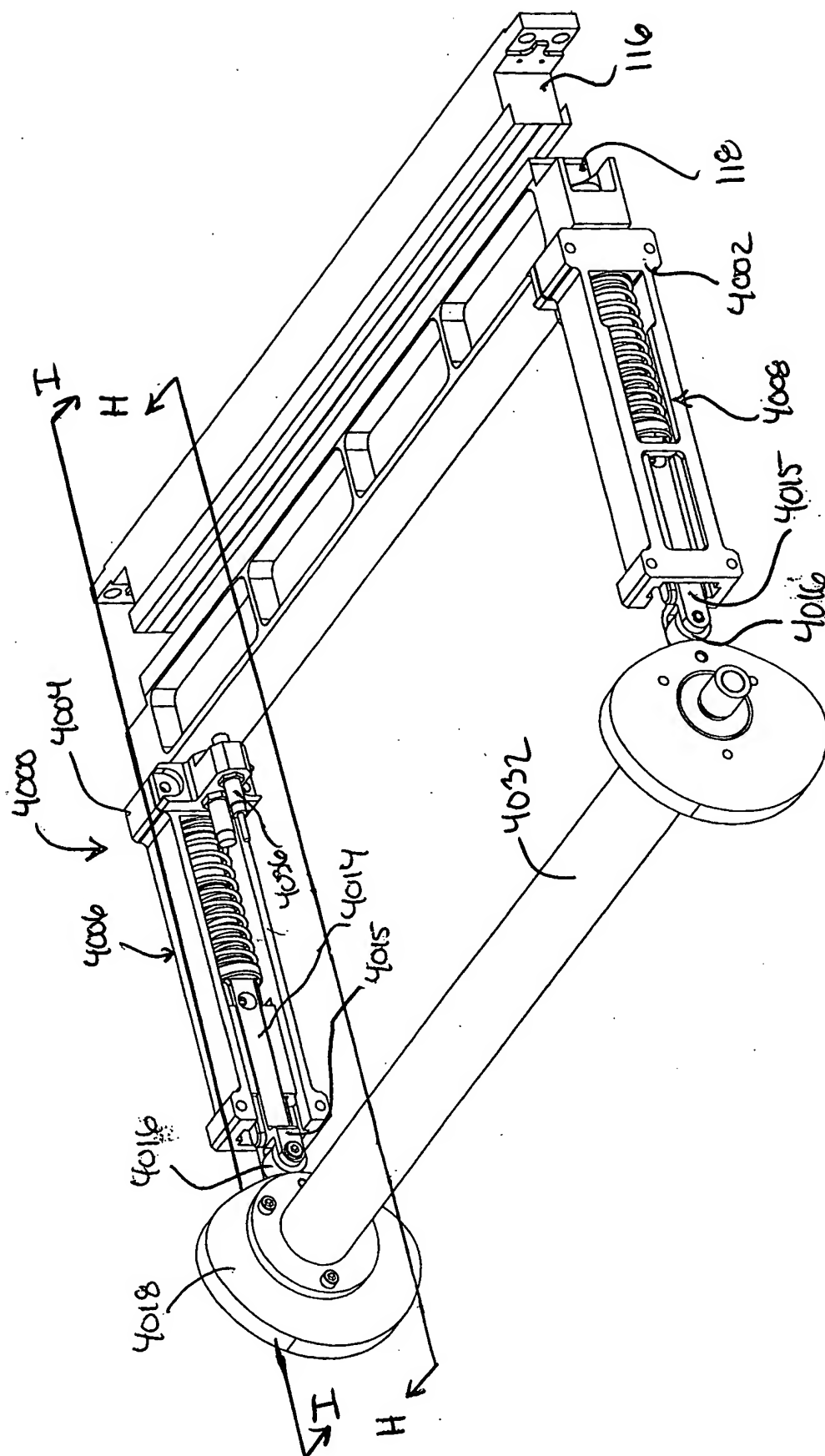


FIG. 9F

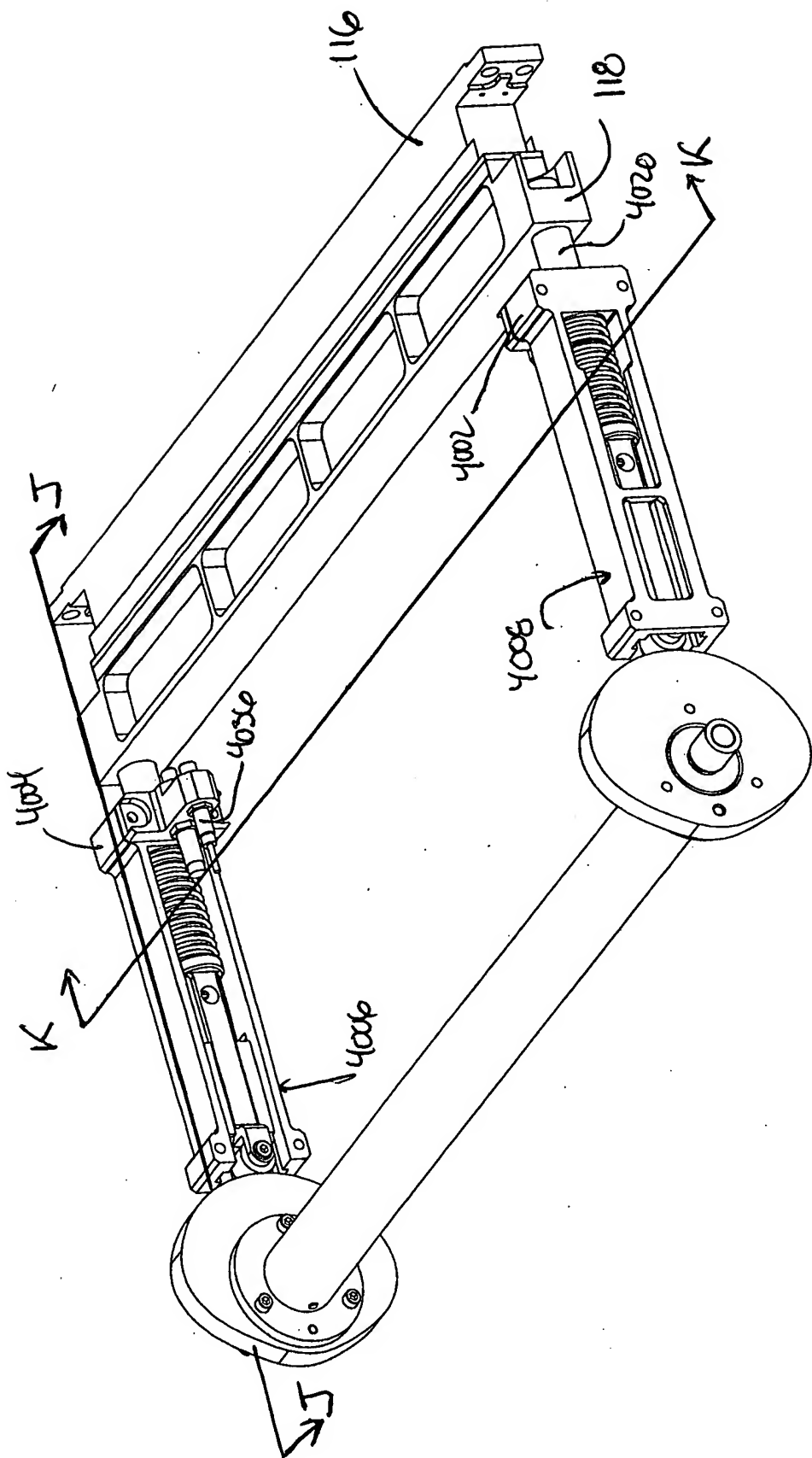


FIG. 9C

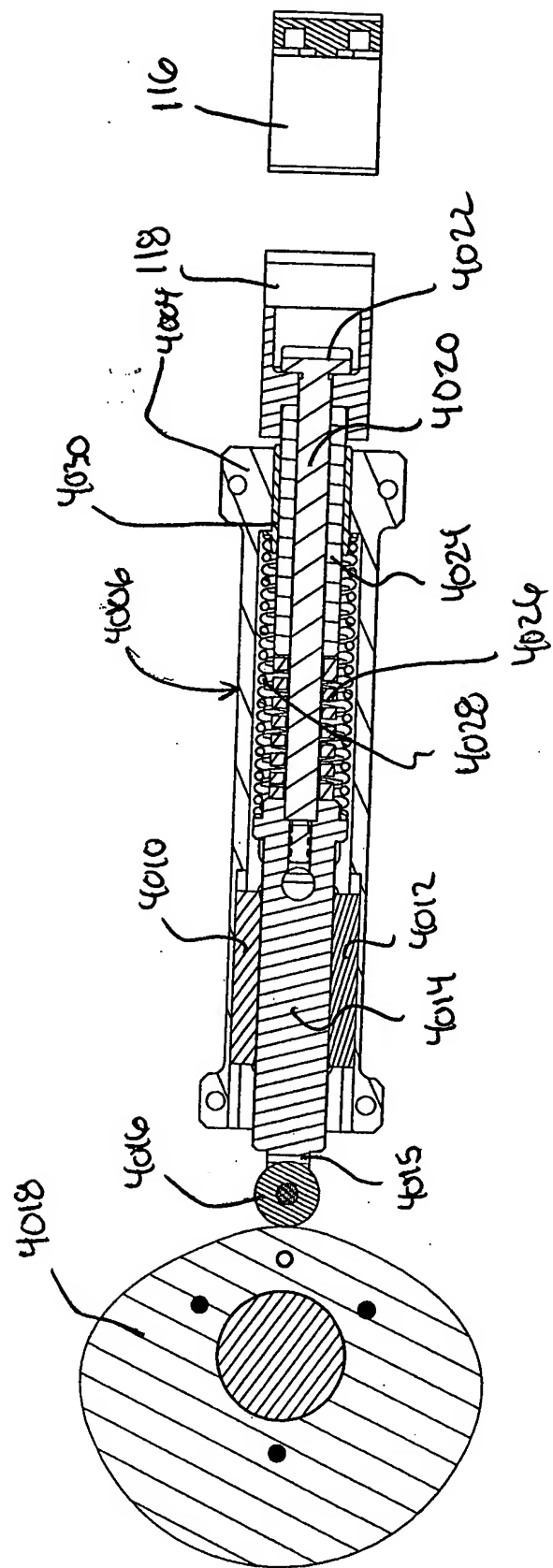


FIG. 9I

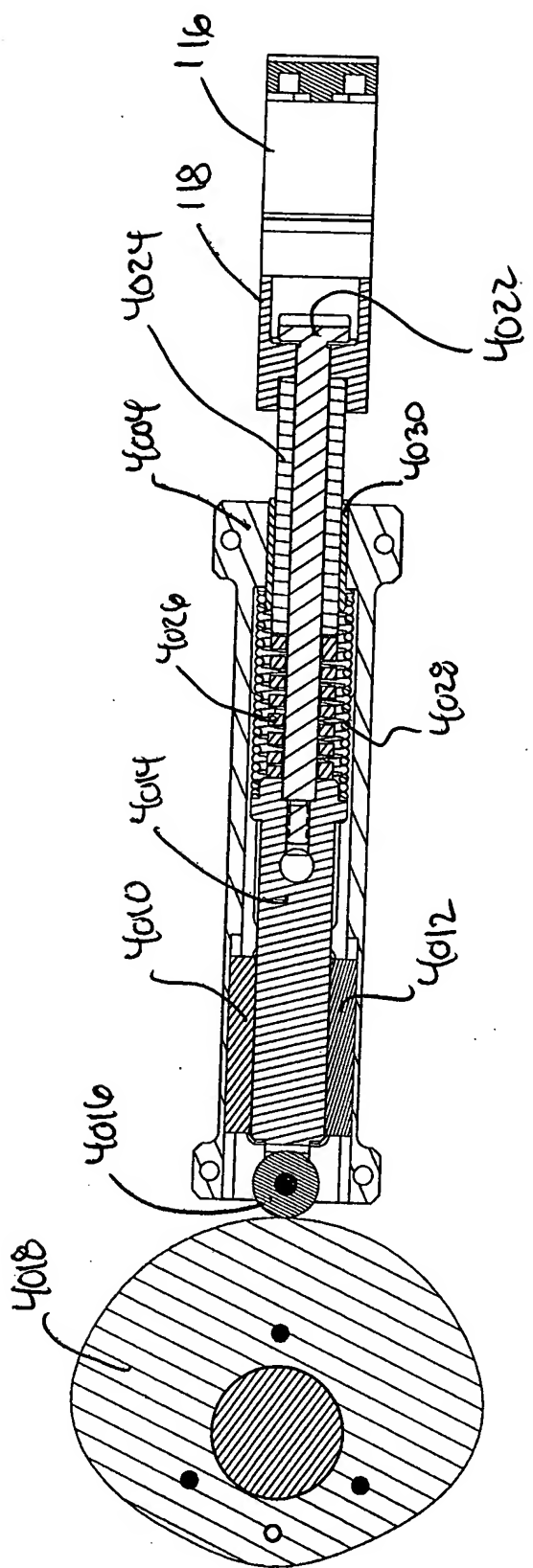


FIG. 95

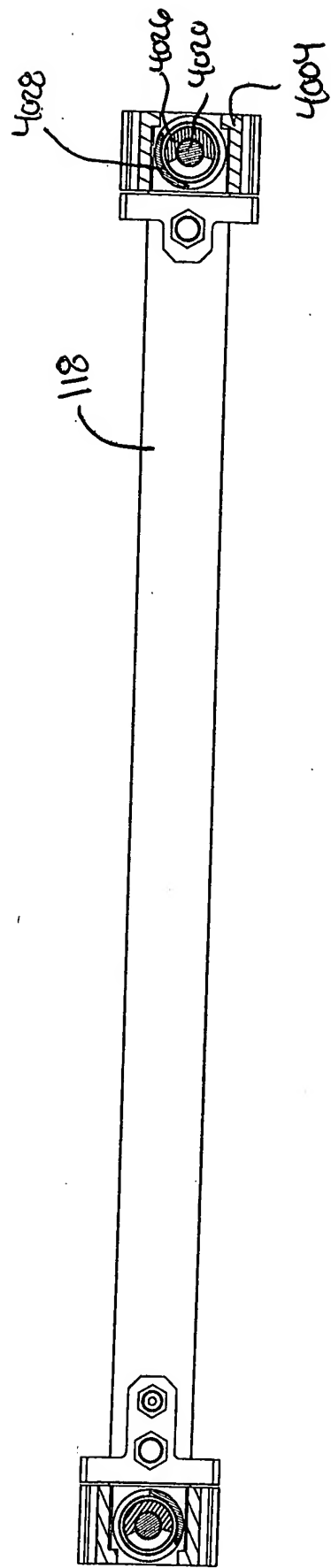


FIG. 9K

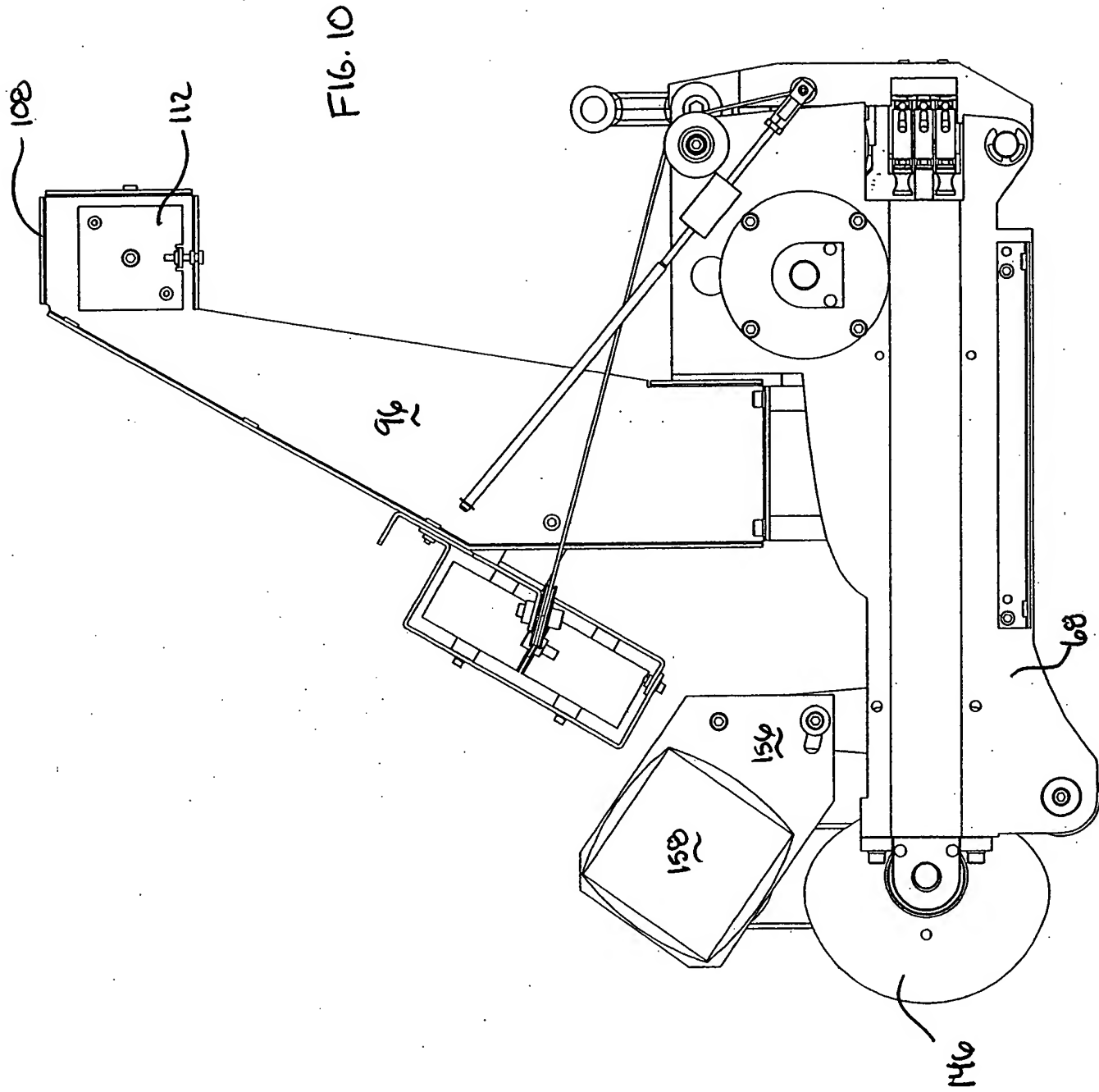
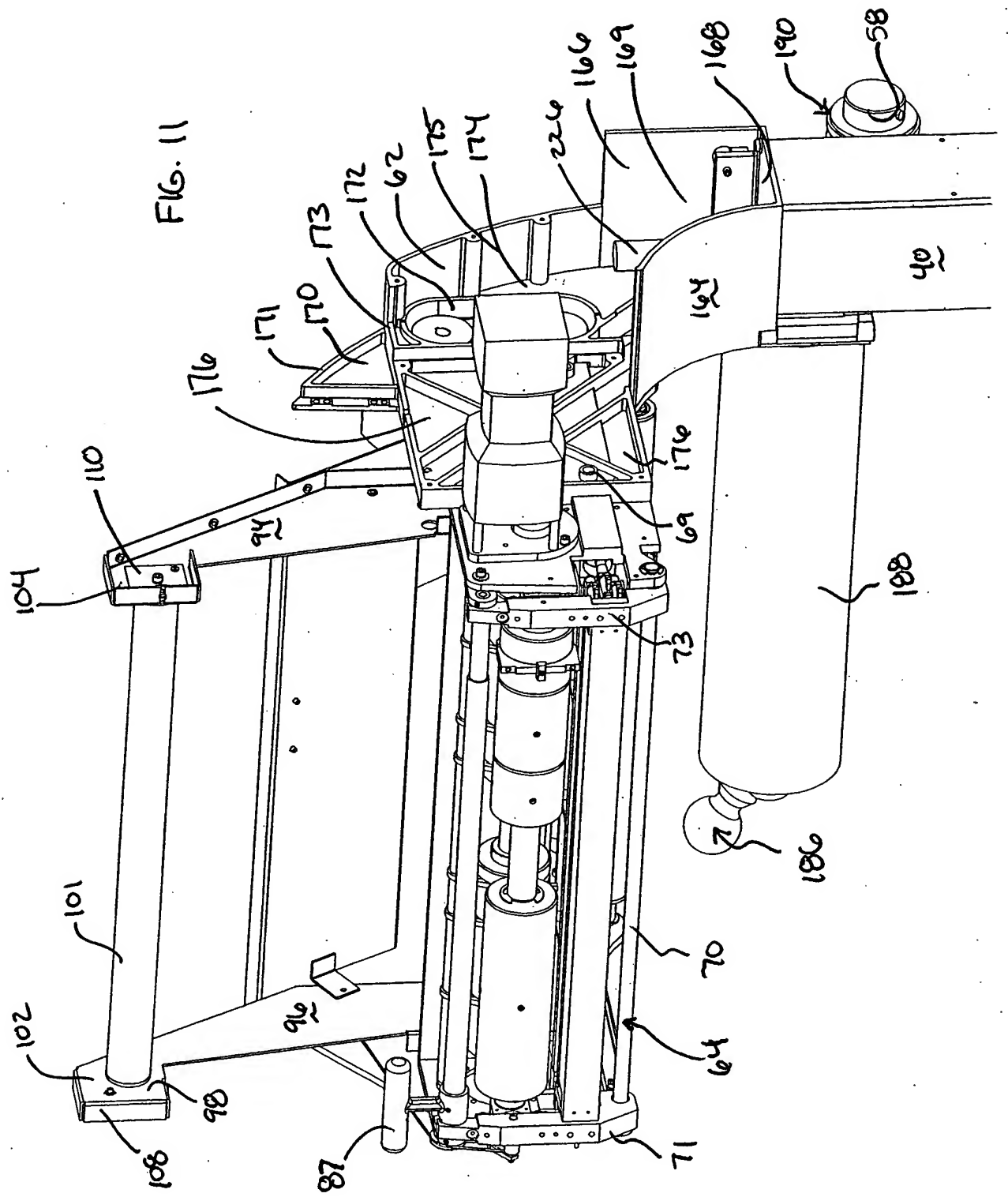


FIG. 10



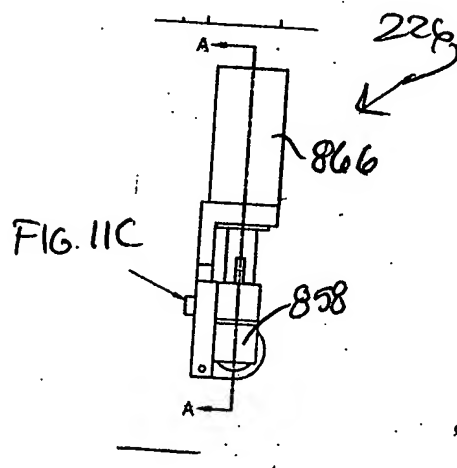
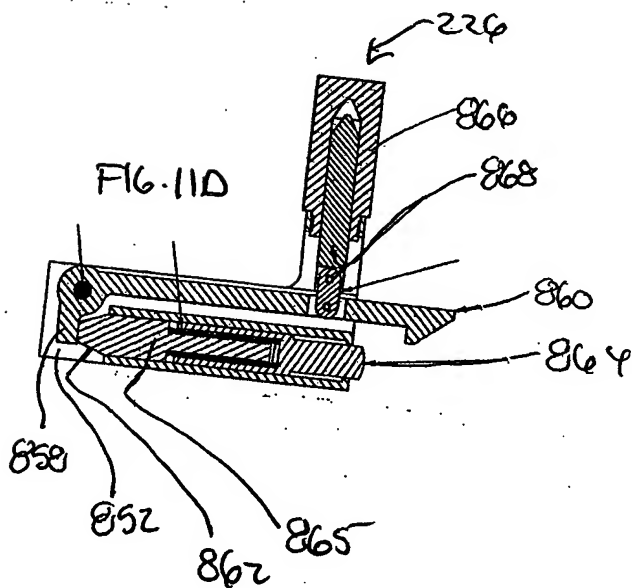
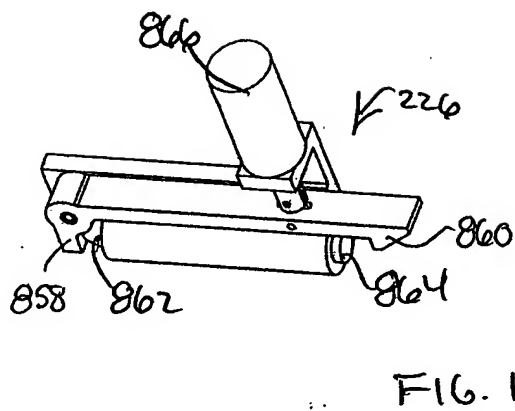
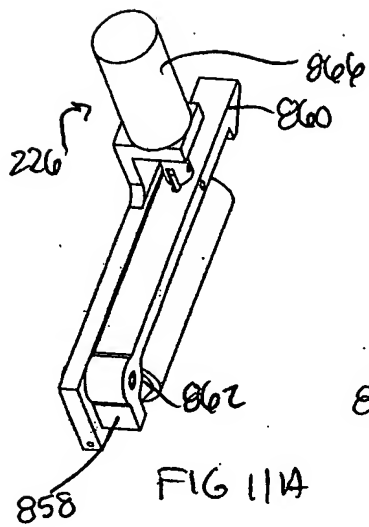


FIG. 12

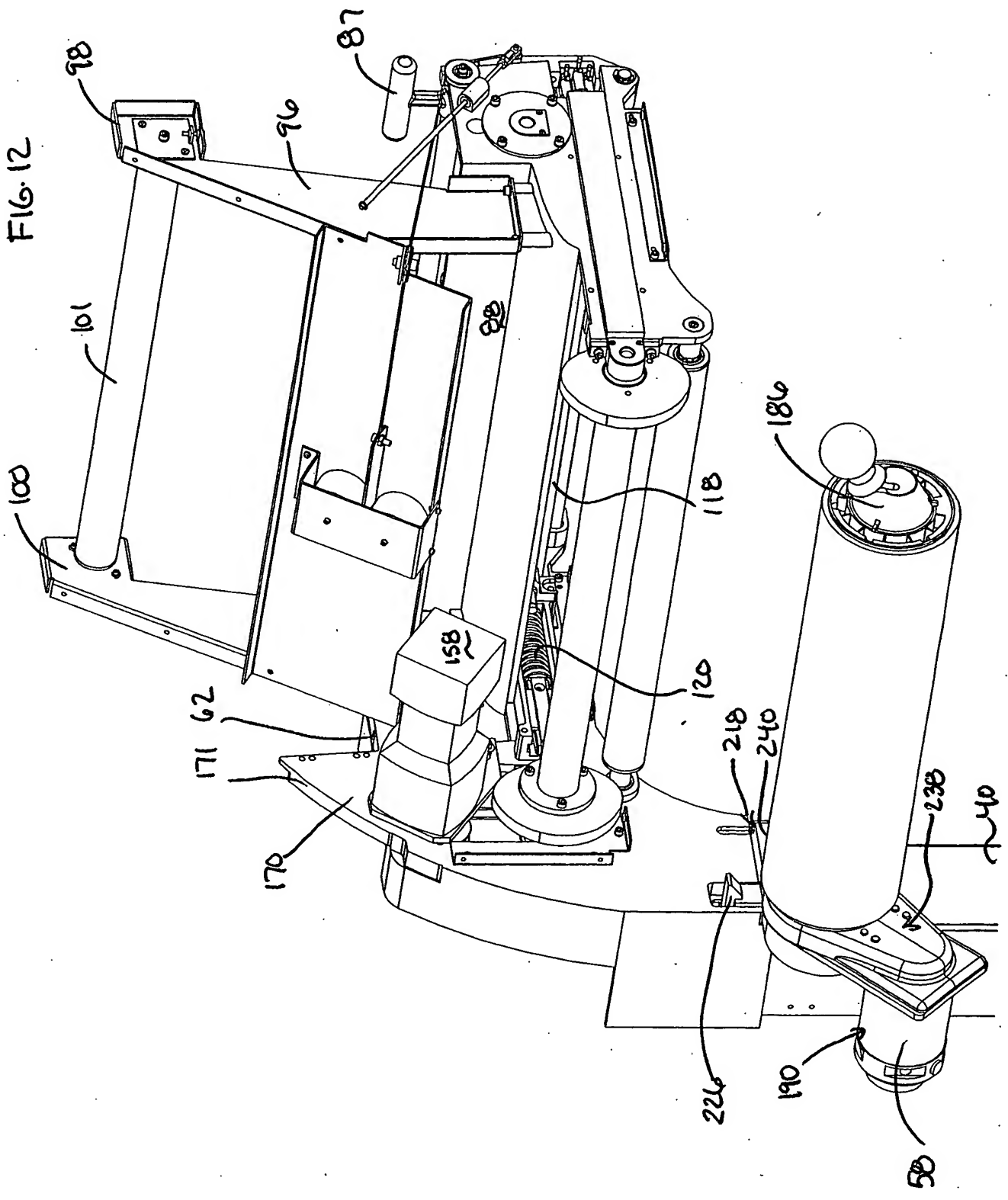


FIG. 13

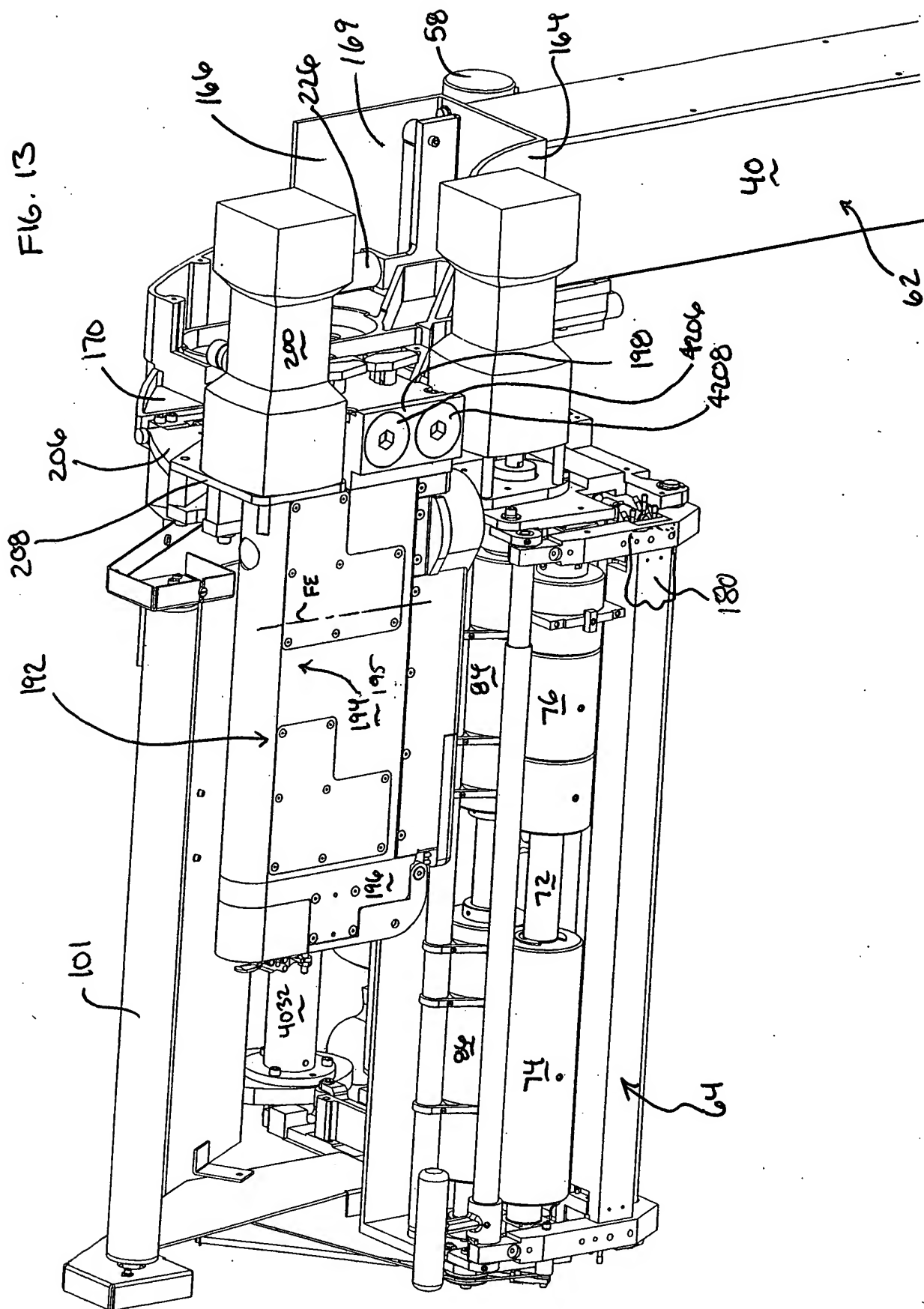


FIG. 14A

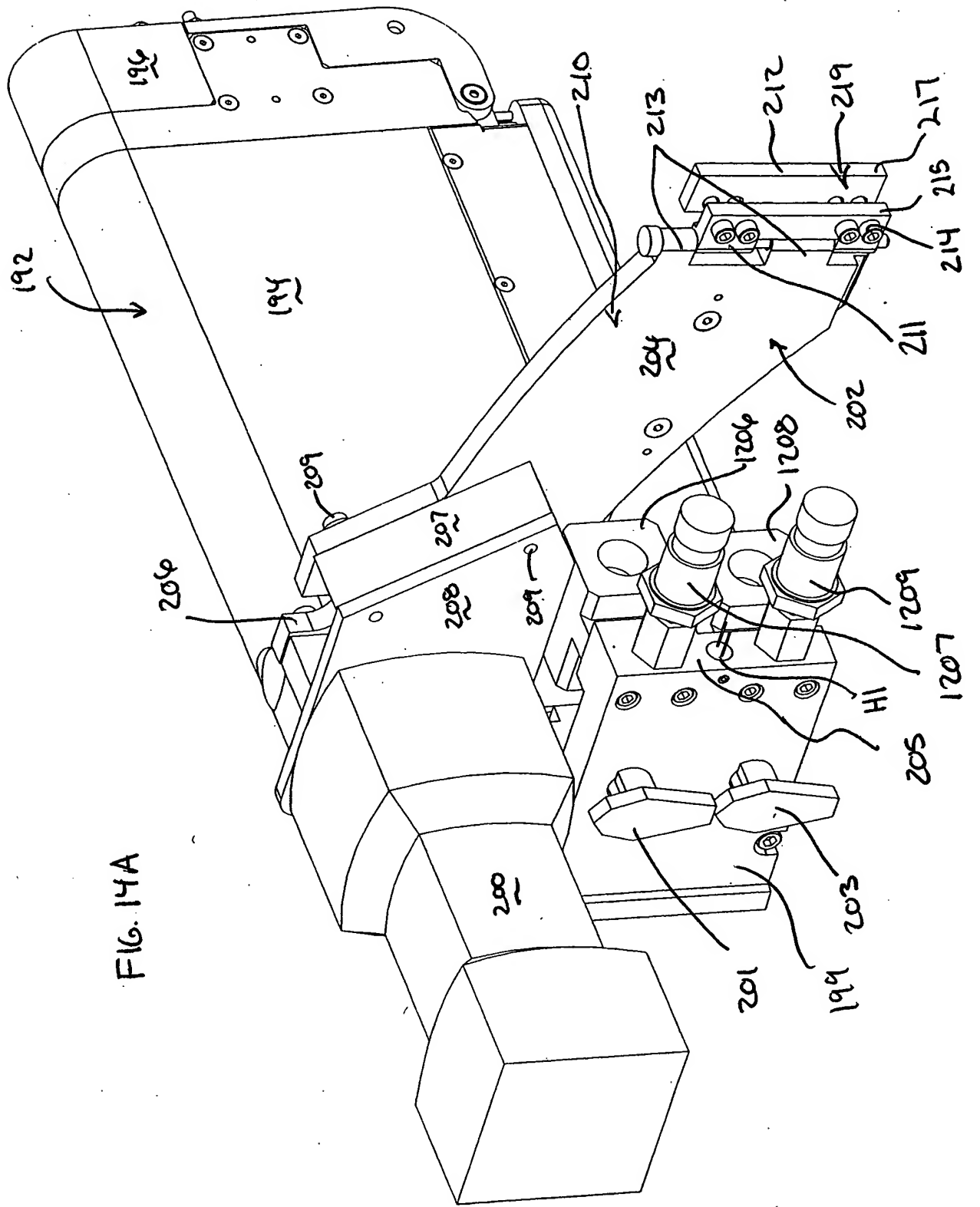


FIG 15A

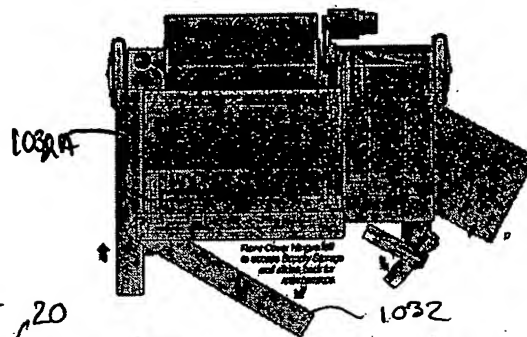


FIG. 15

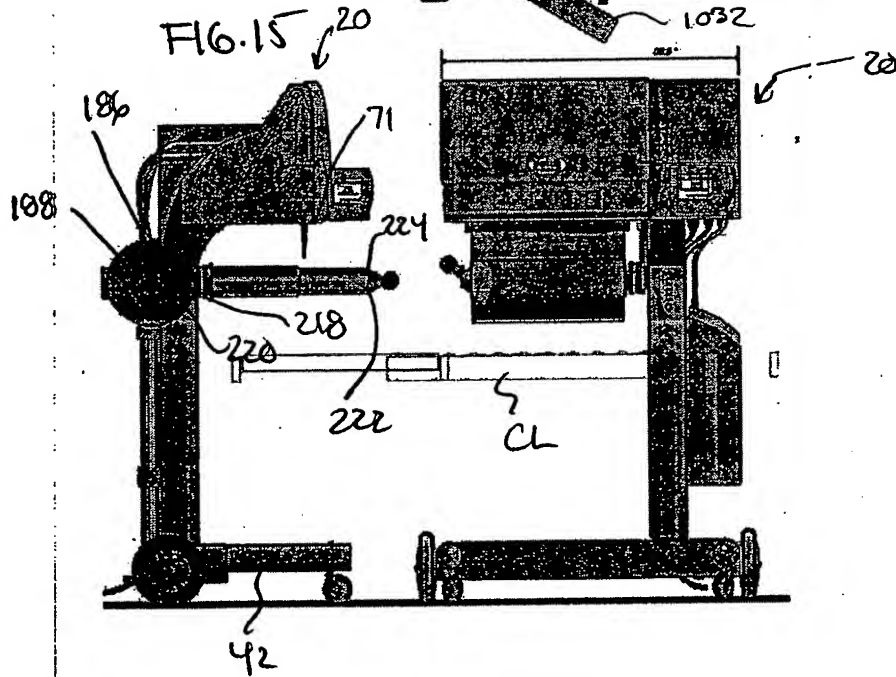
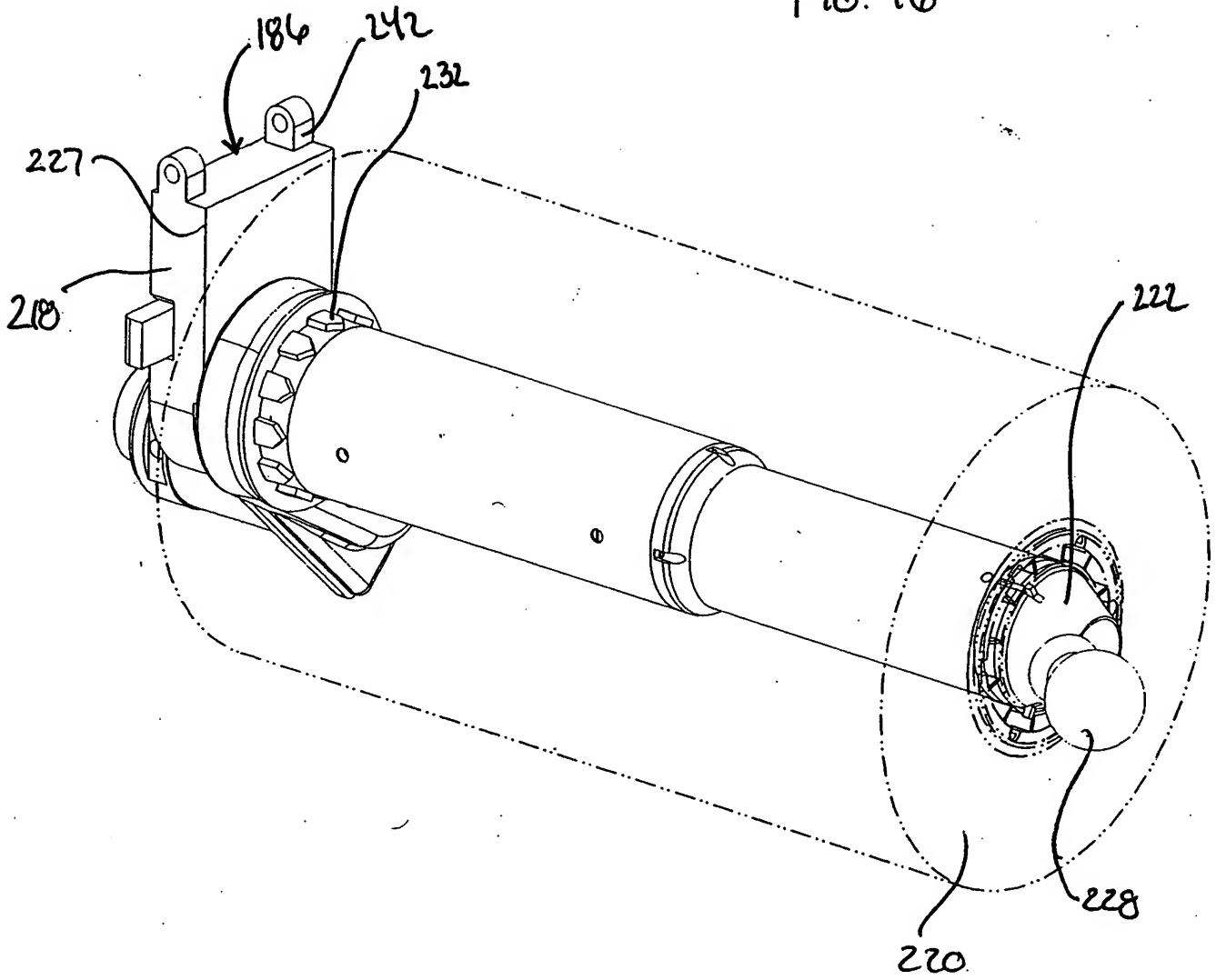
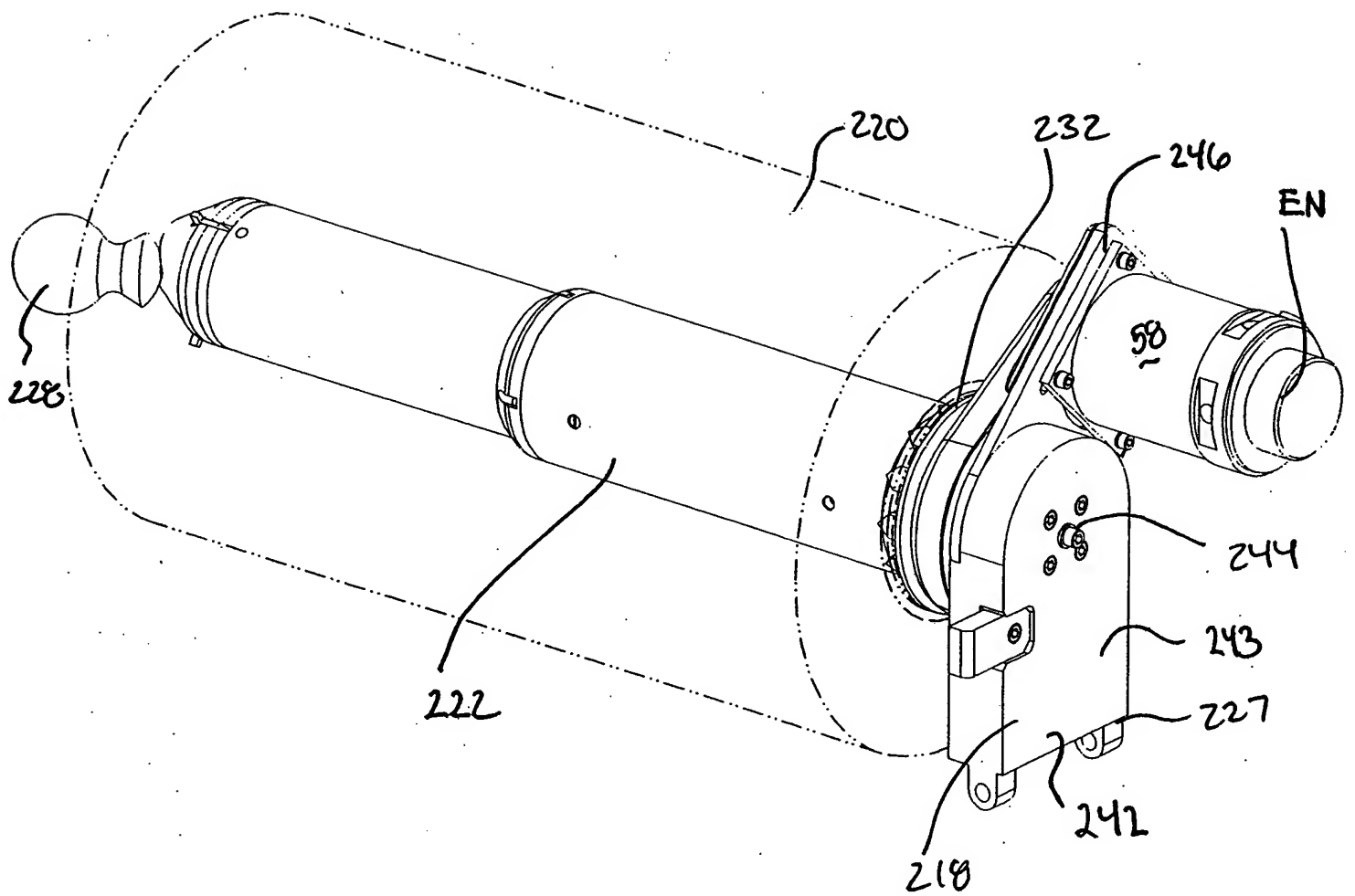


FIG-15B

FIG. 16



F16.17



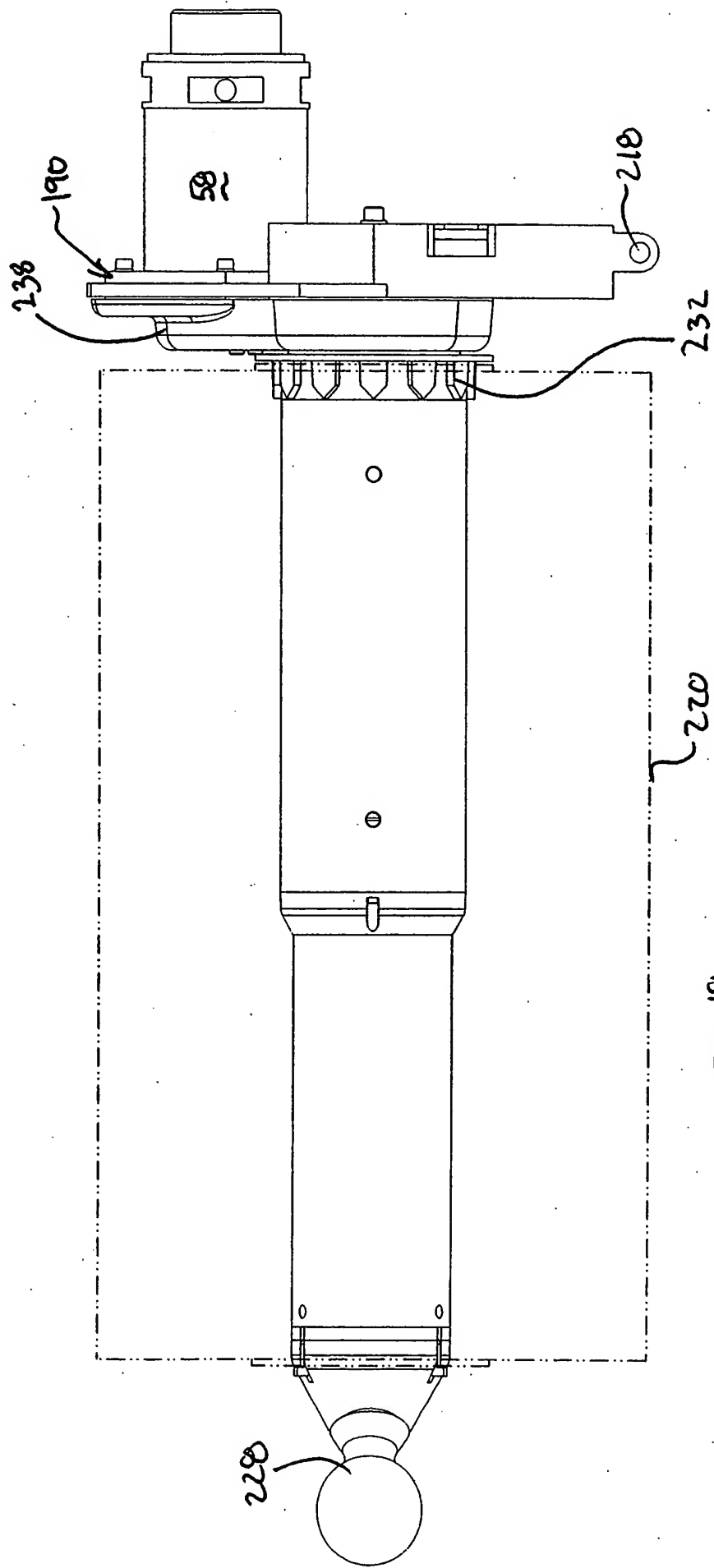


FIG. 18

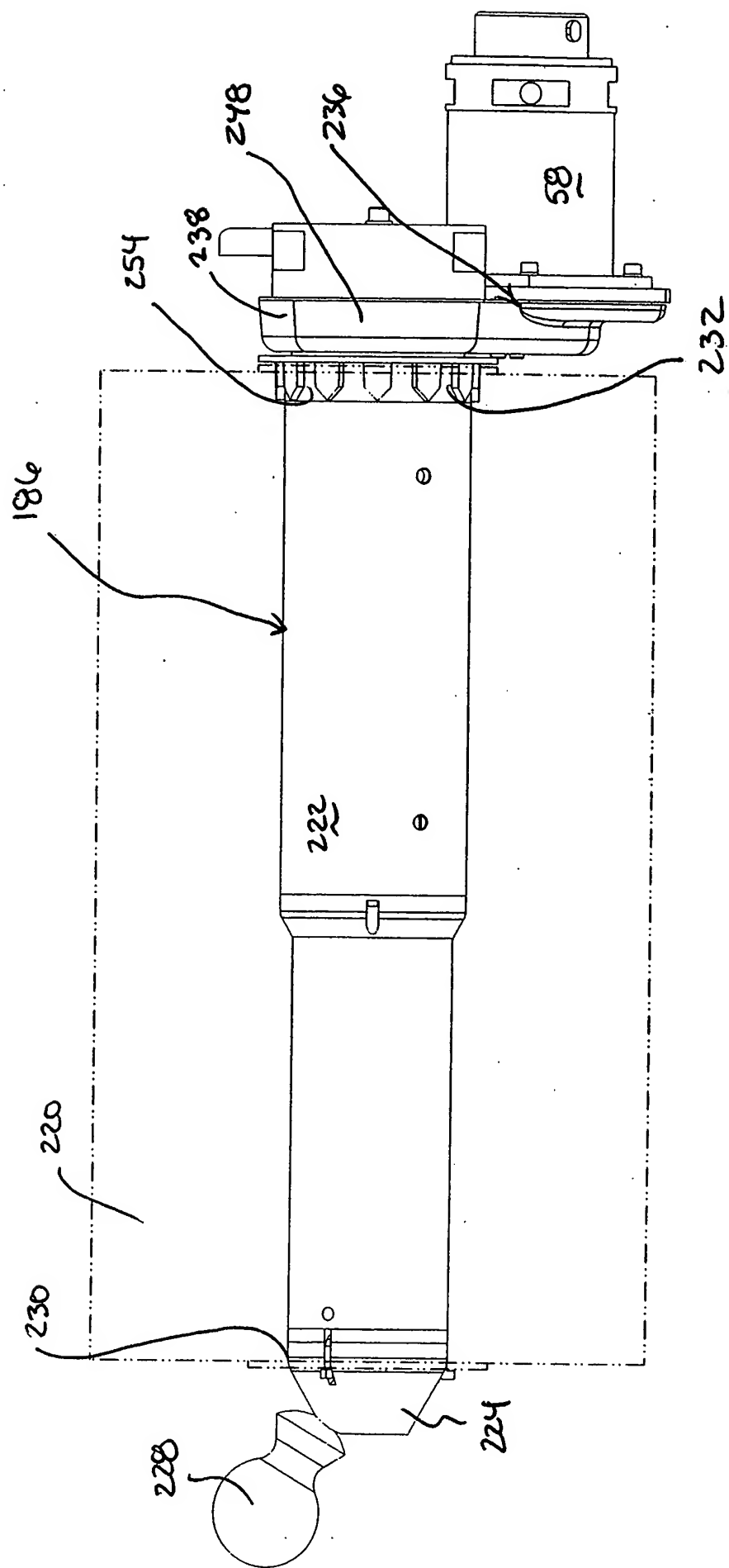
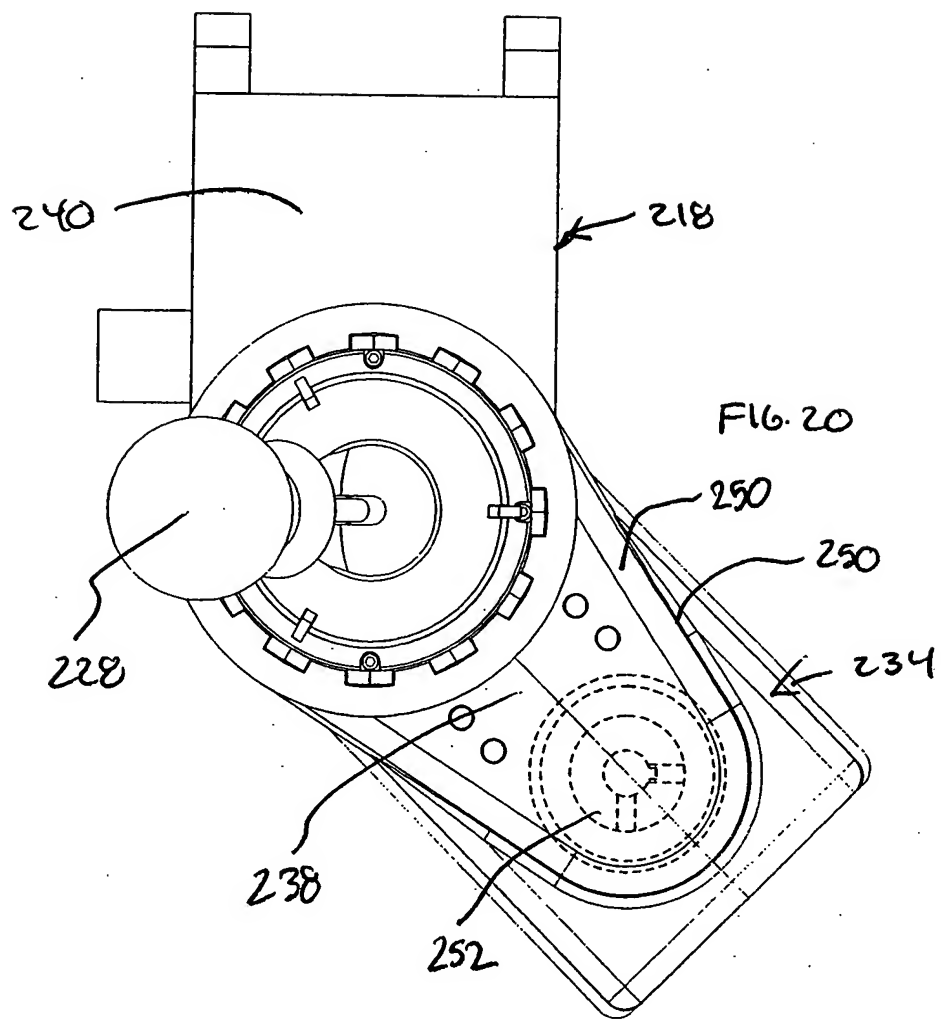


FIG. 19



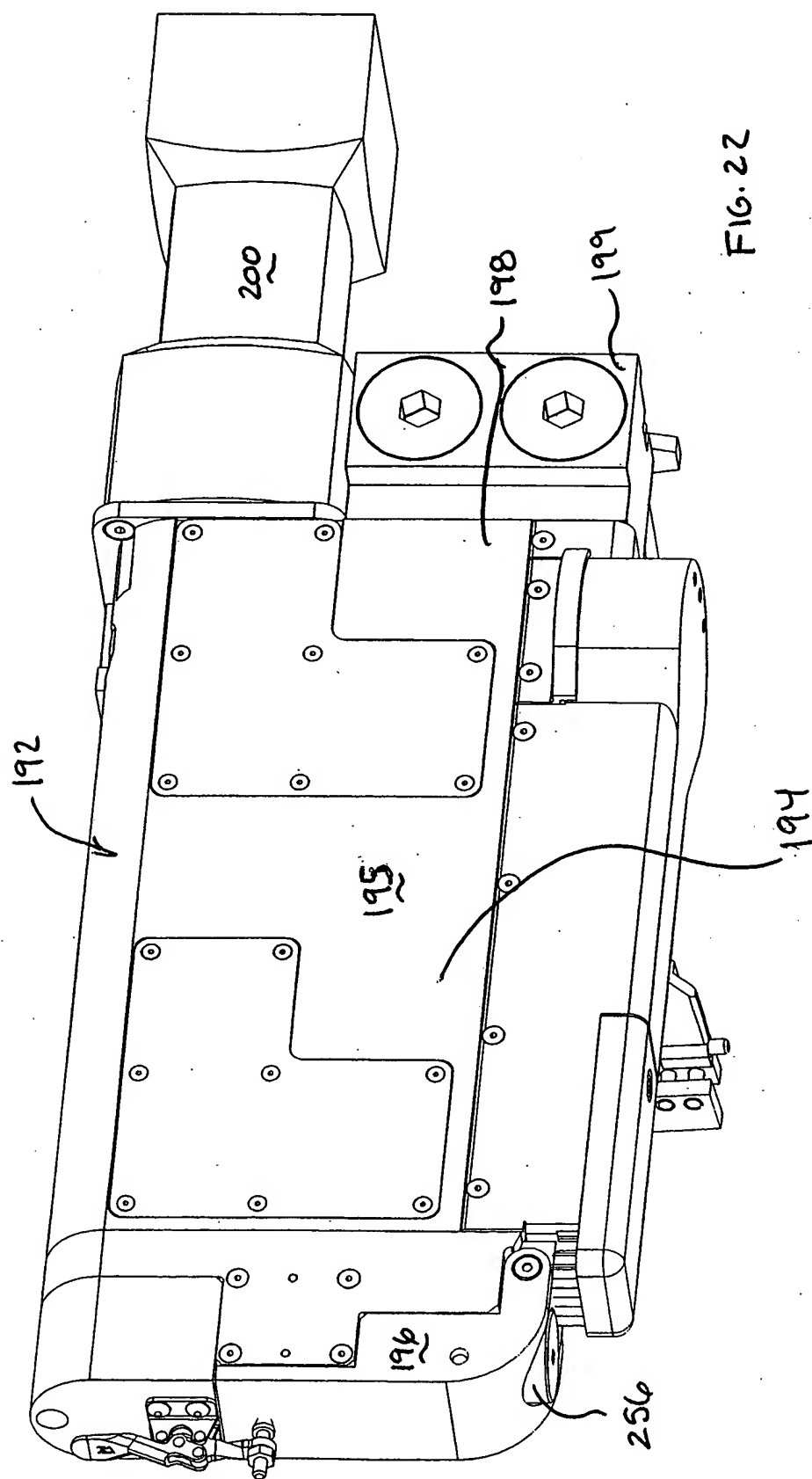
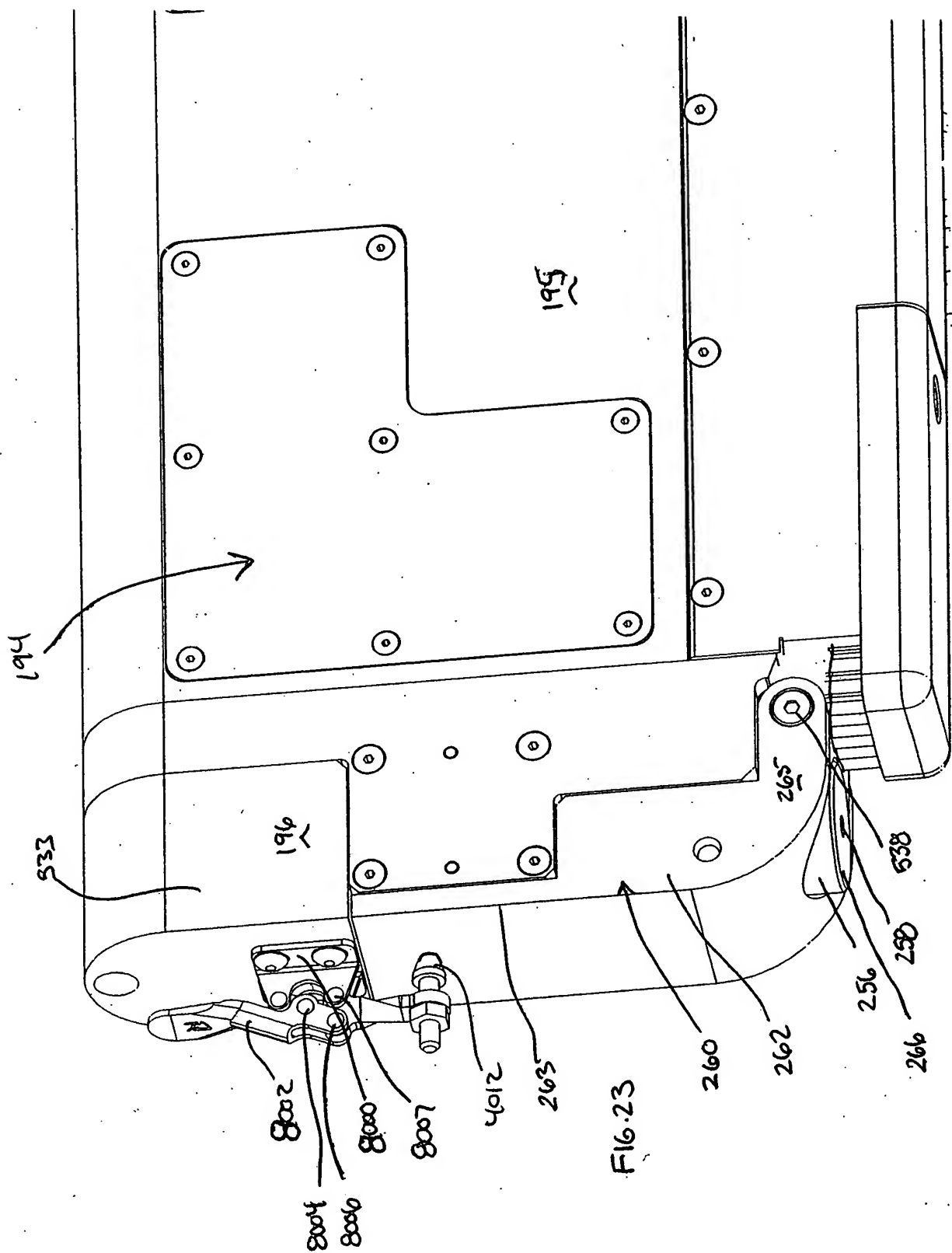
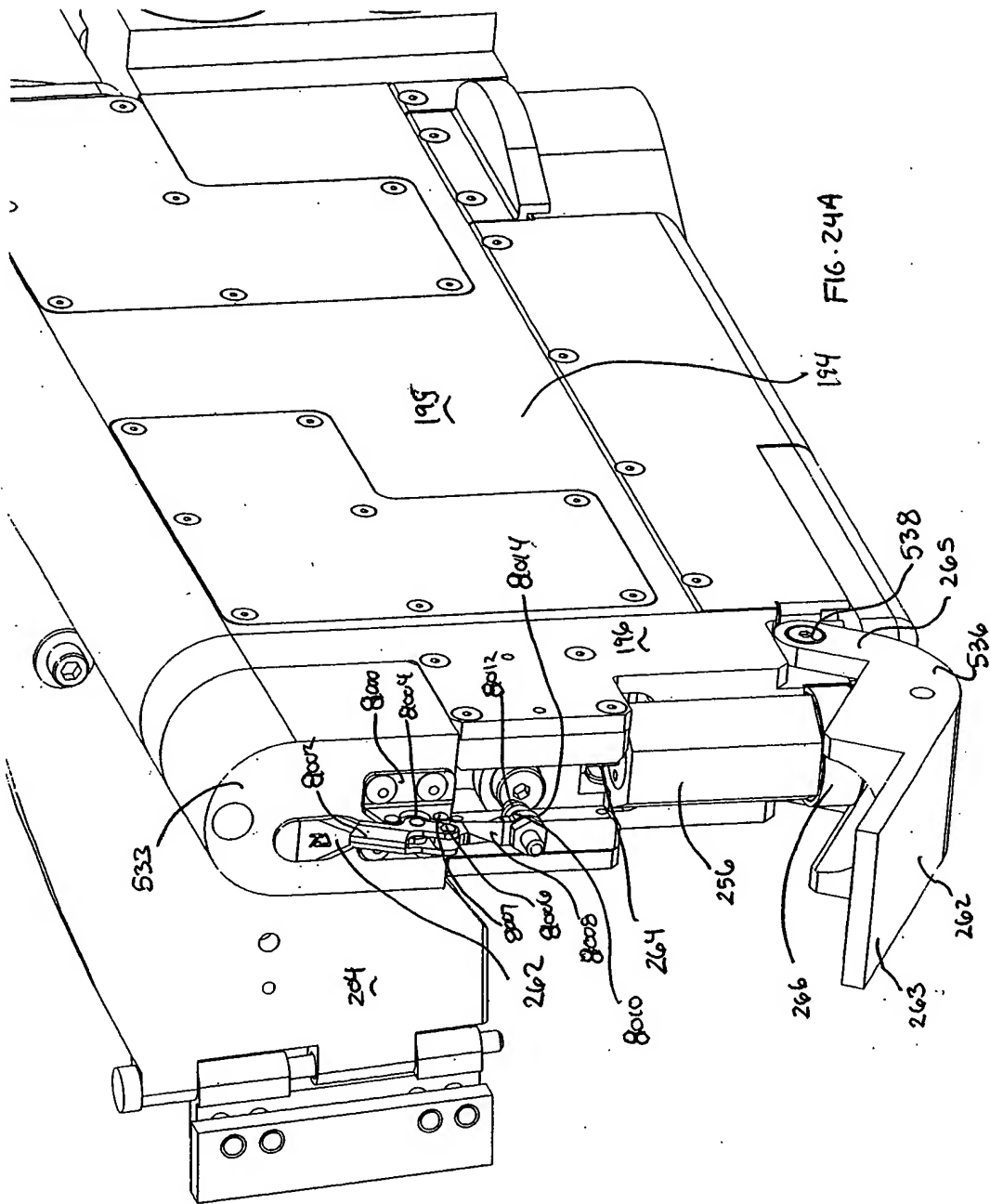
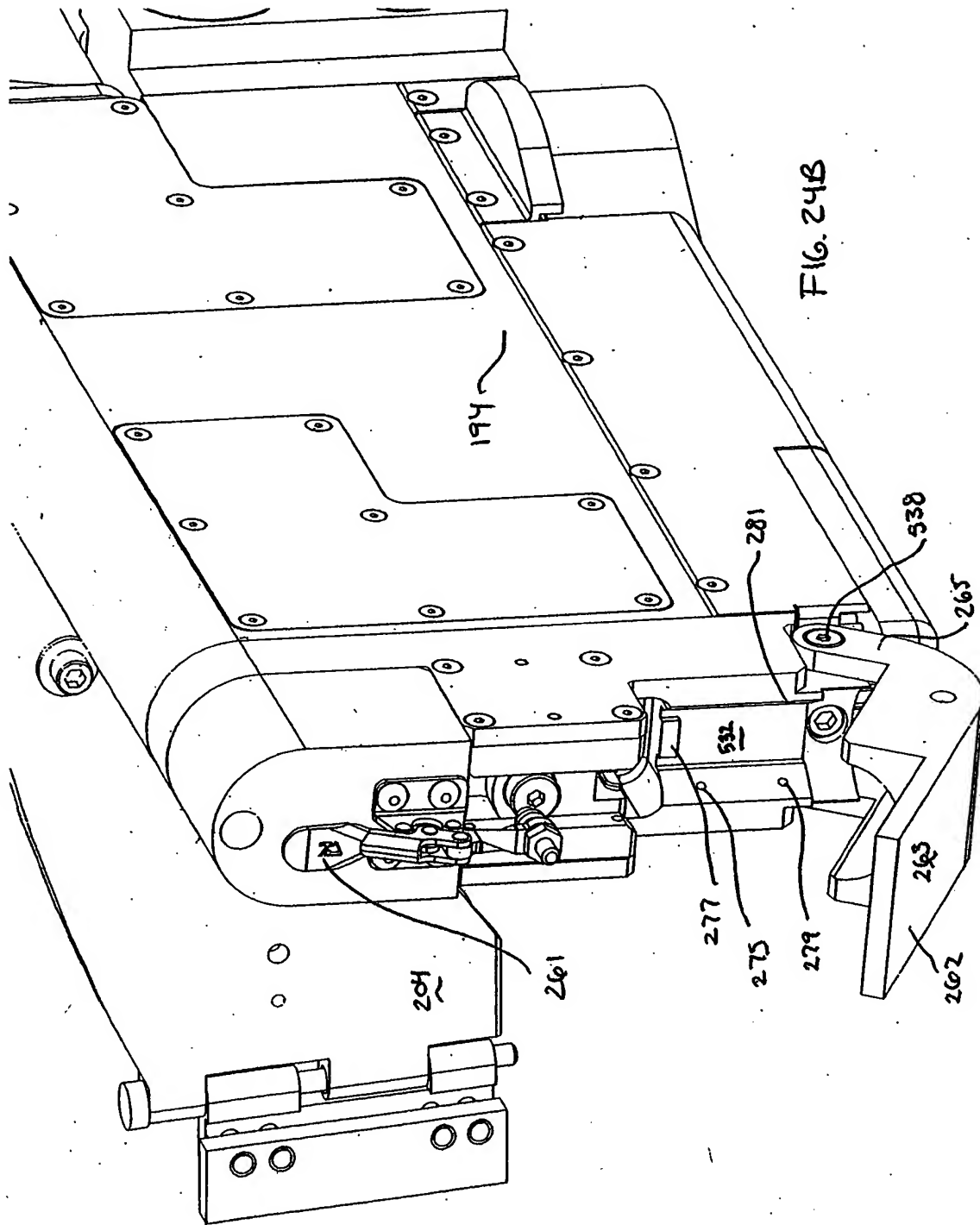


FIG. 22







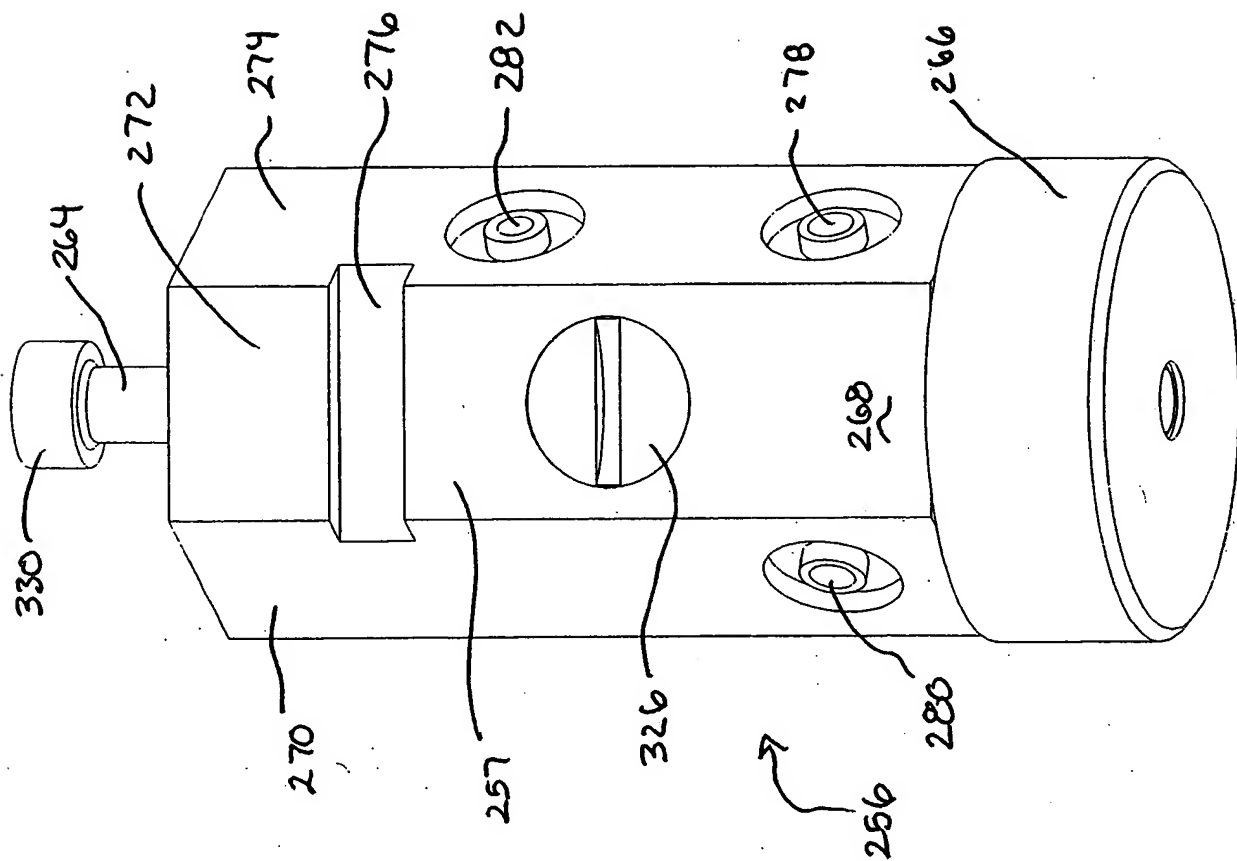


FIG. 25

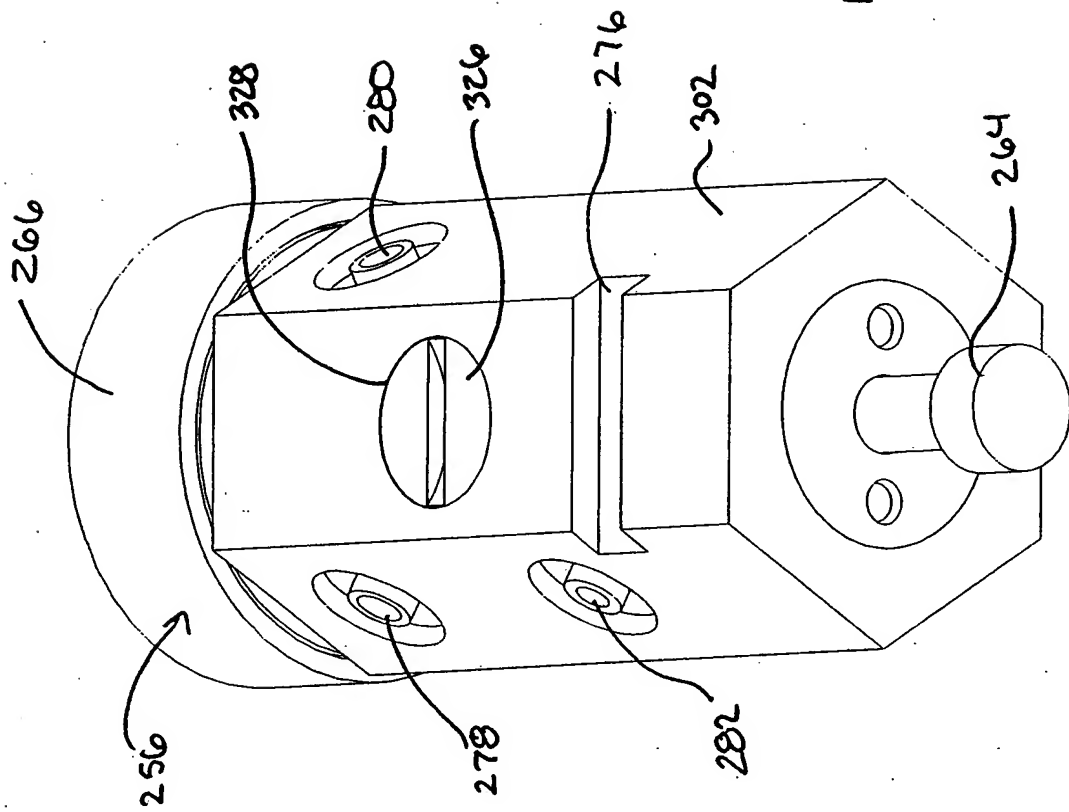
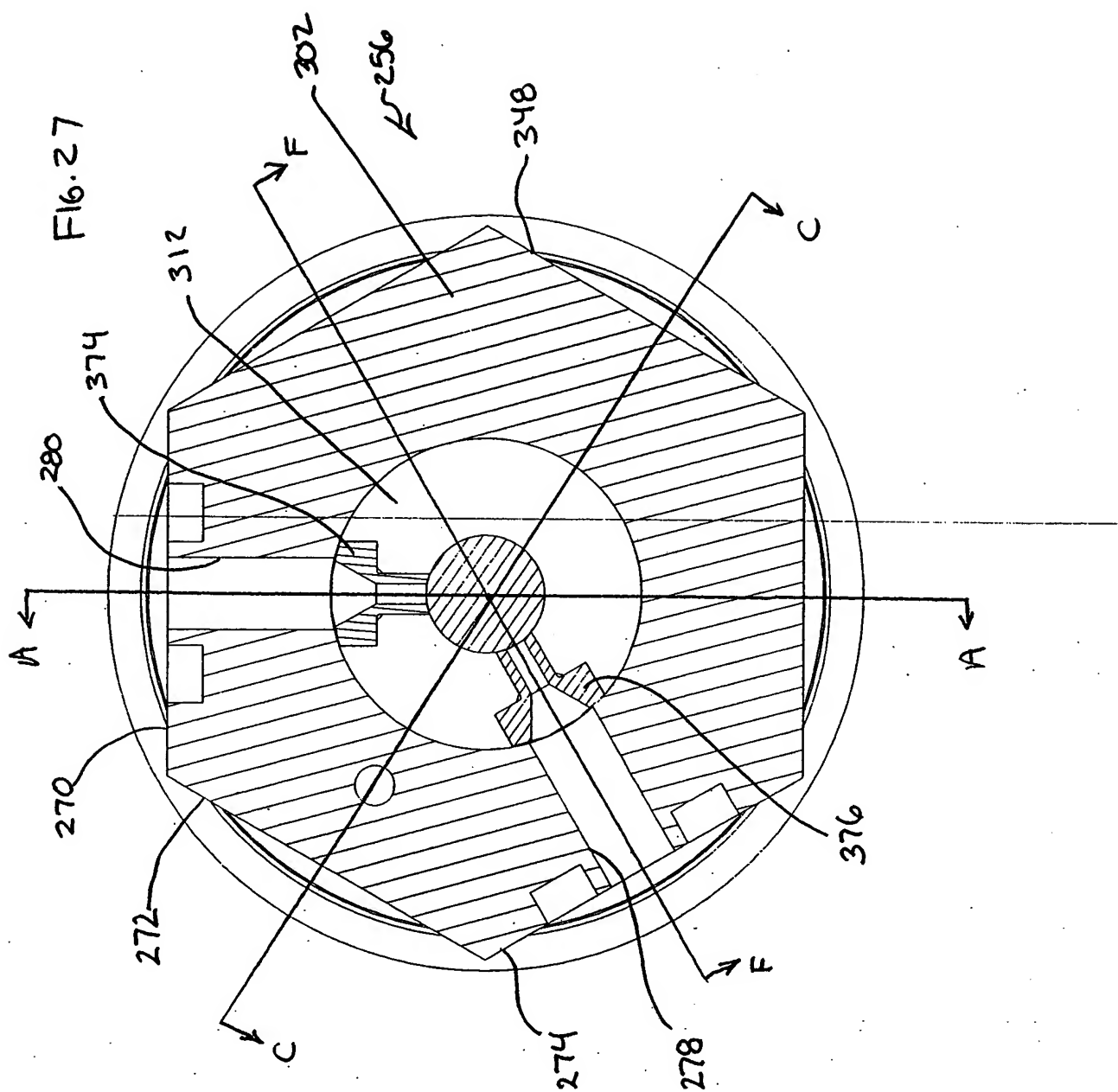
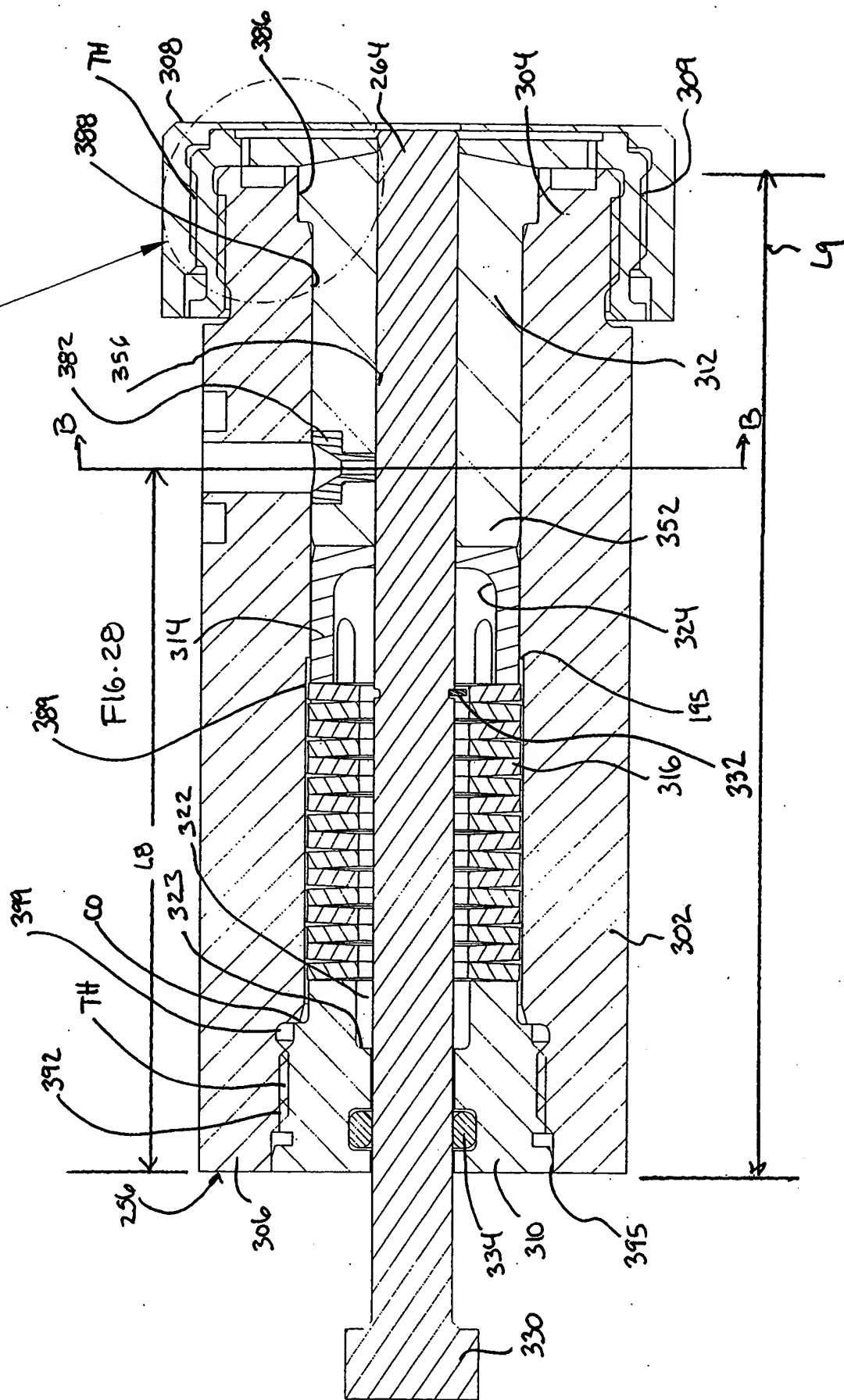
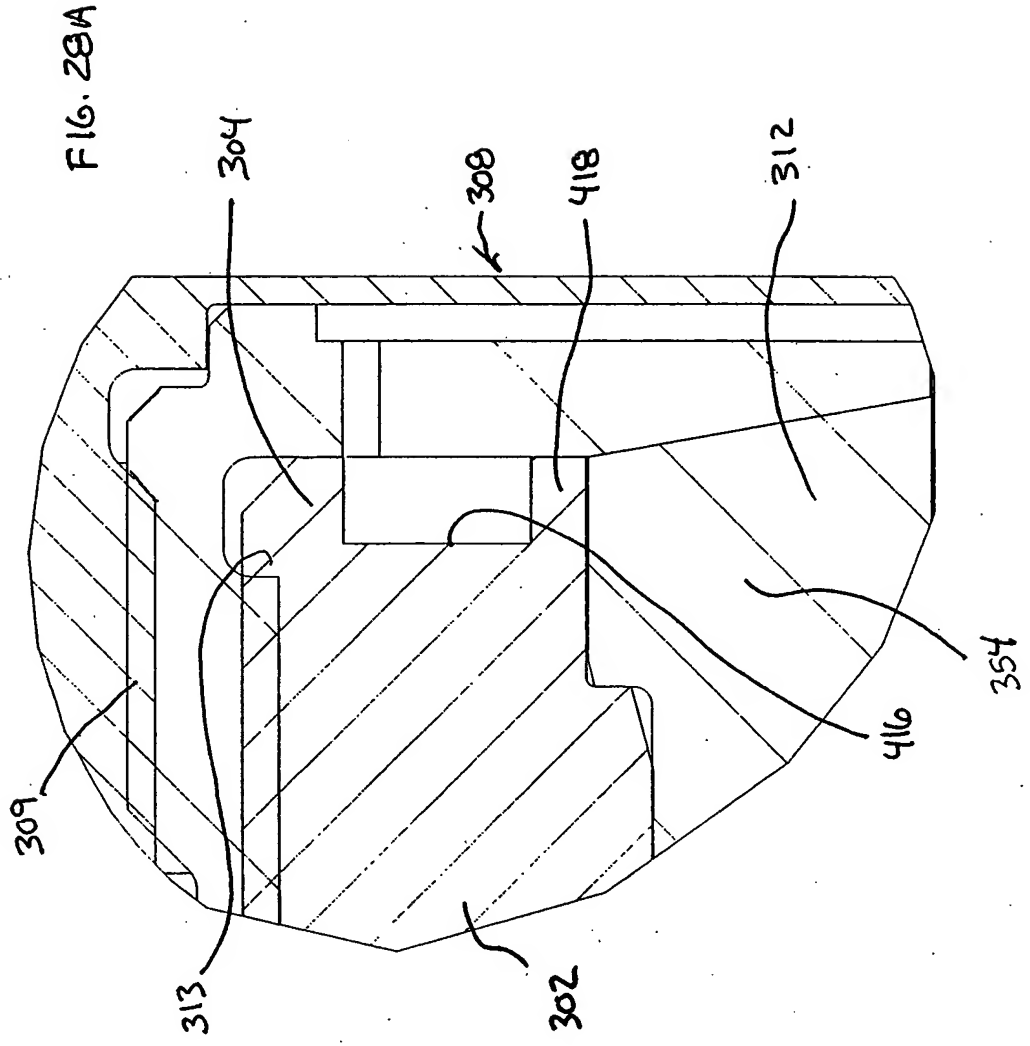


FIG. 26



SEE DETAIL 28A





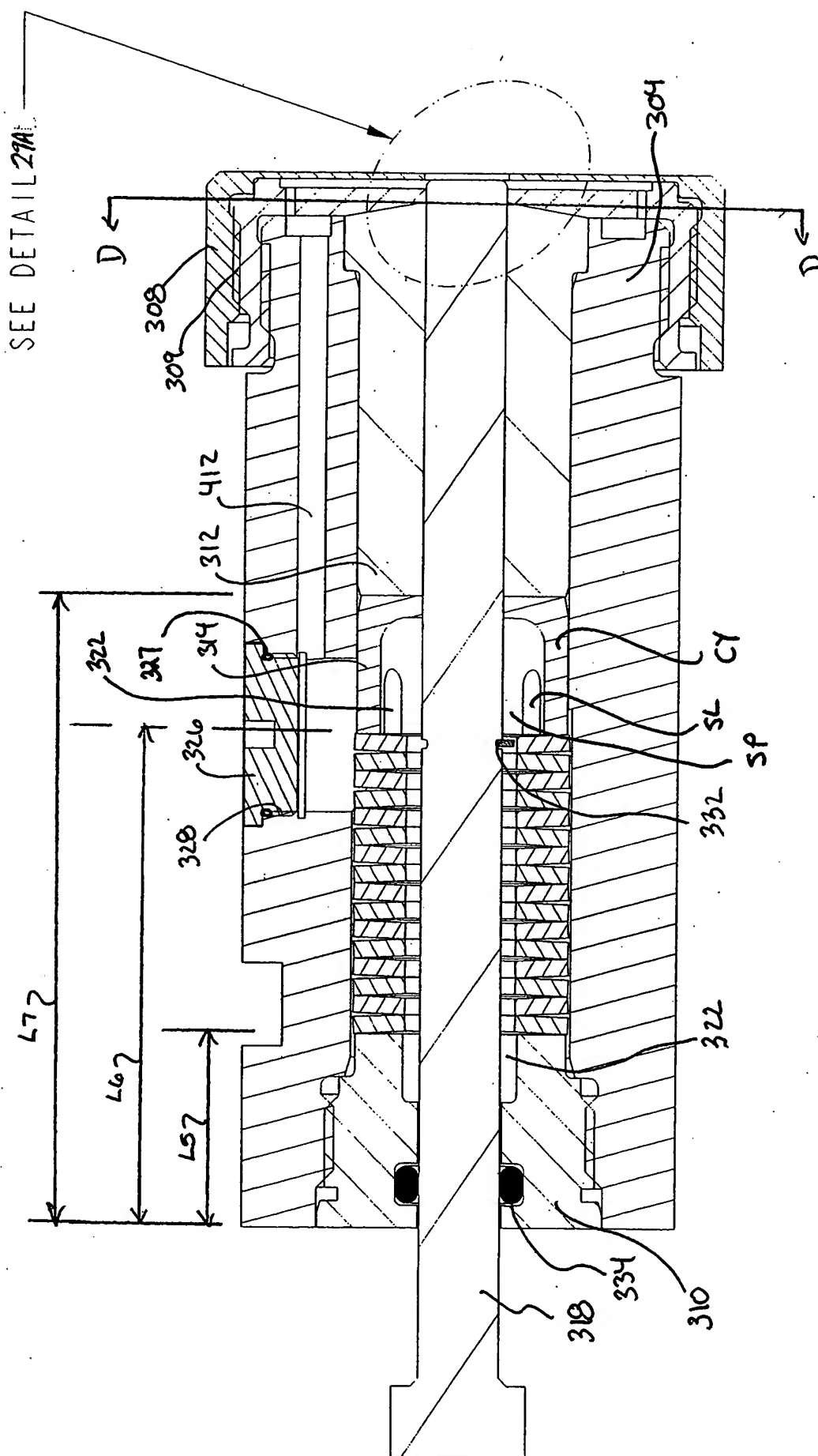


FIG. 29

FIG. 29A

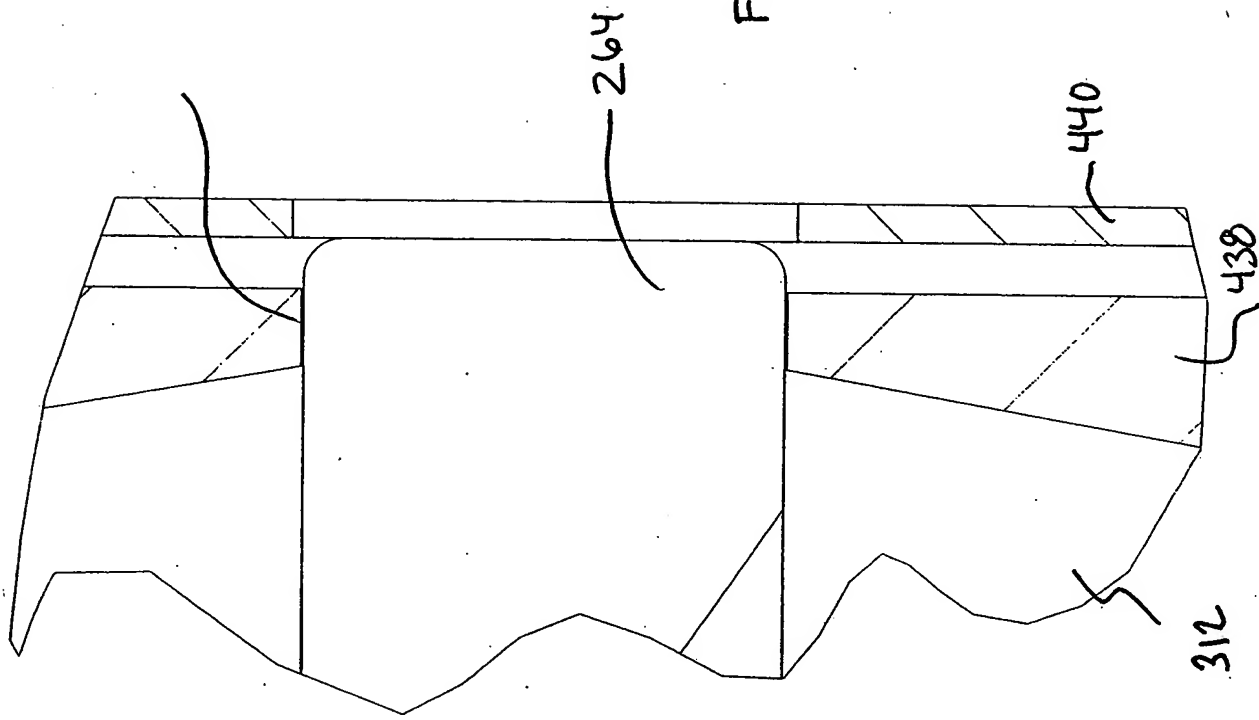
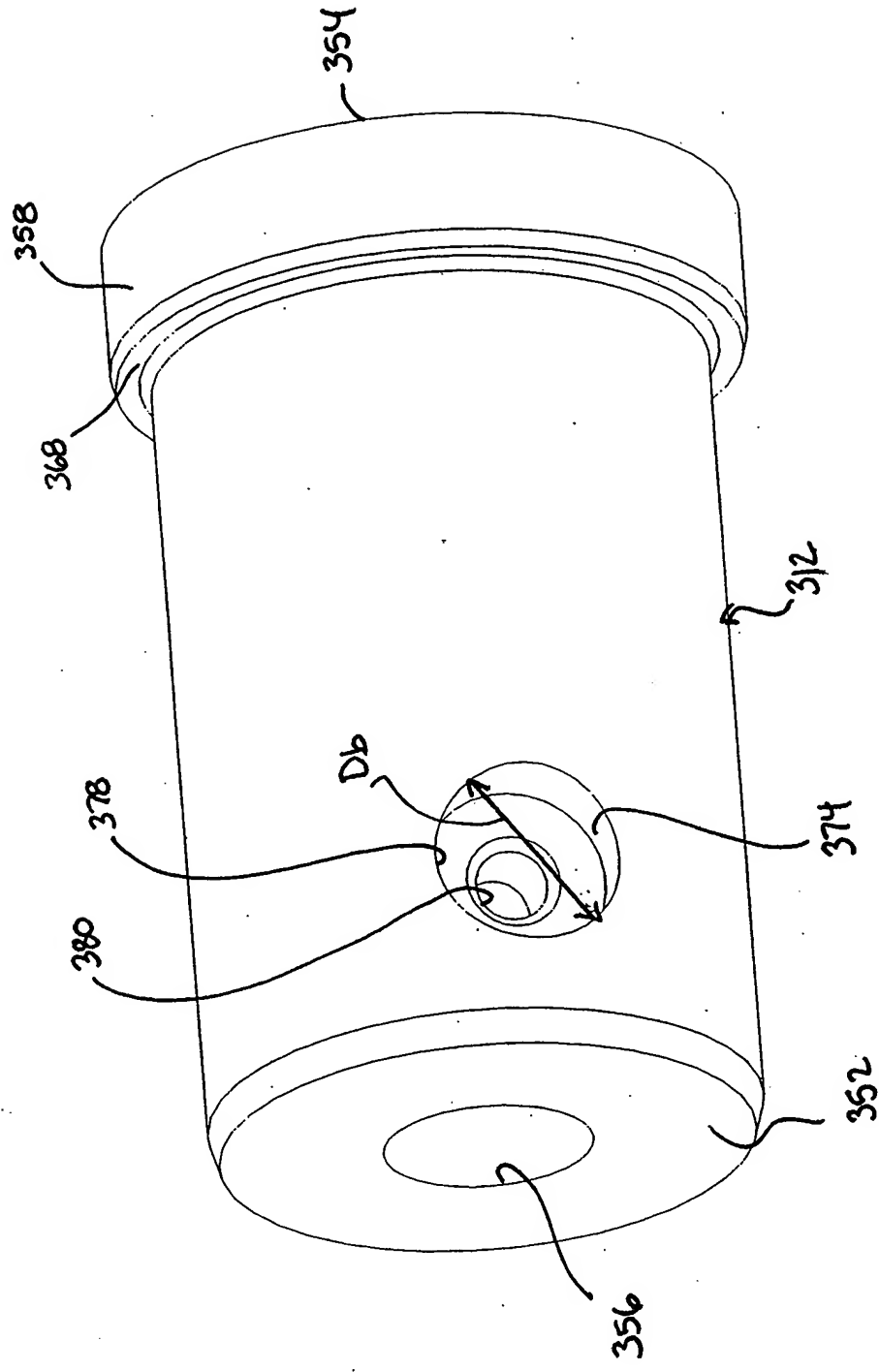
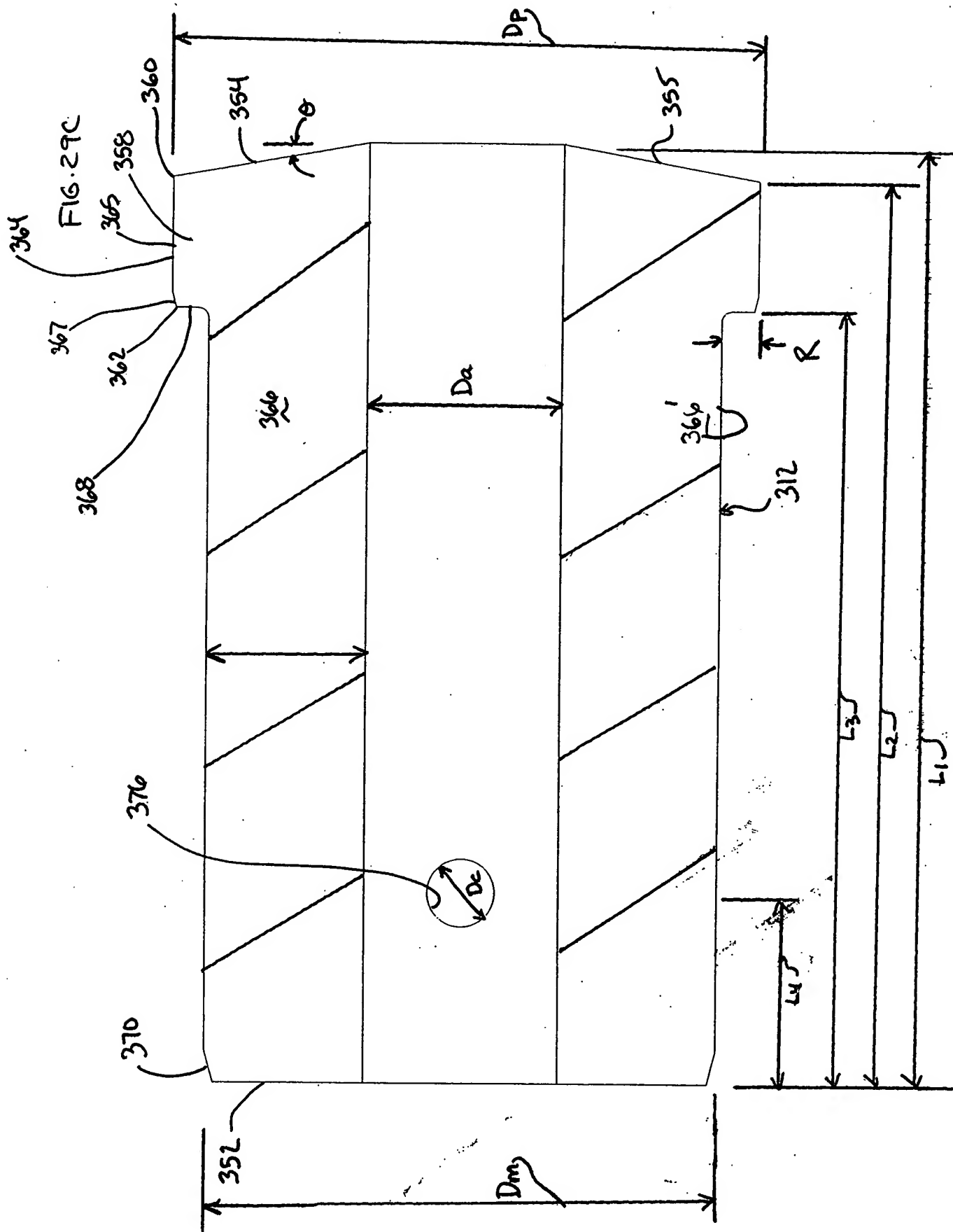


FIG. 29B





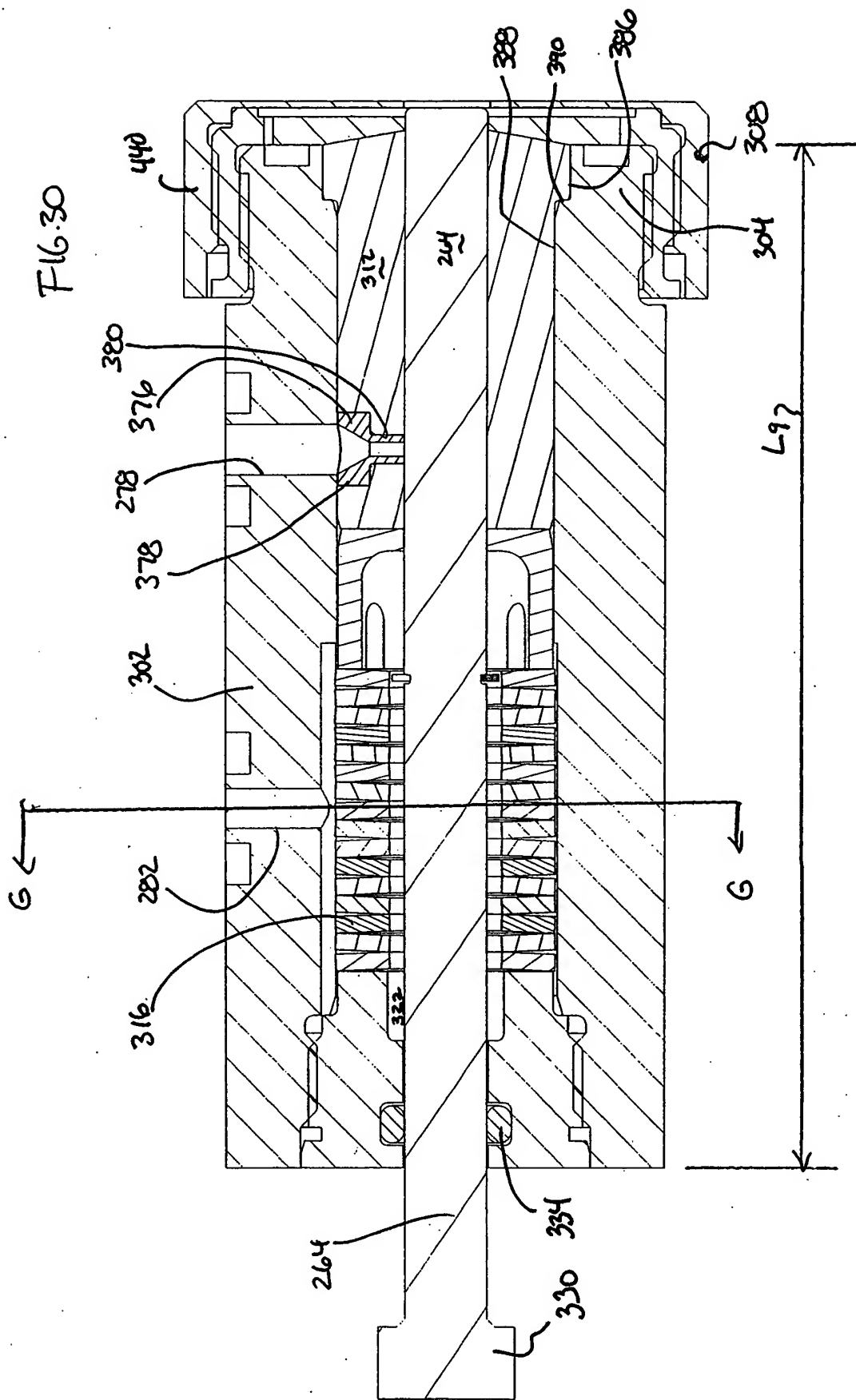
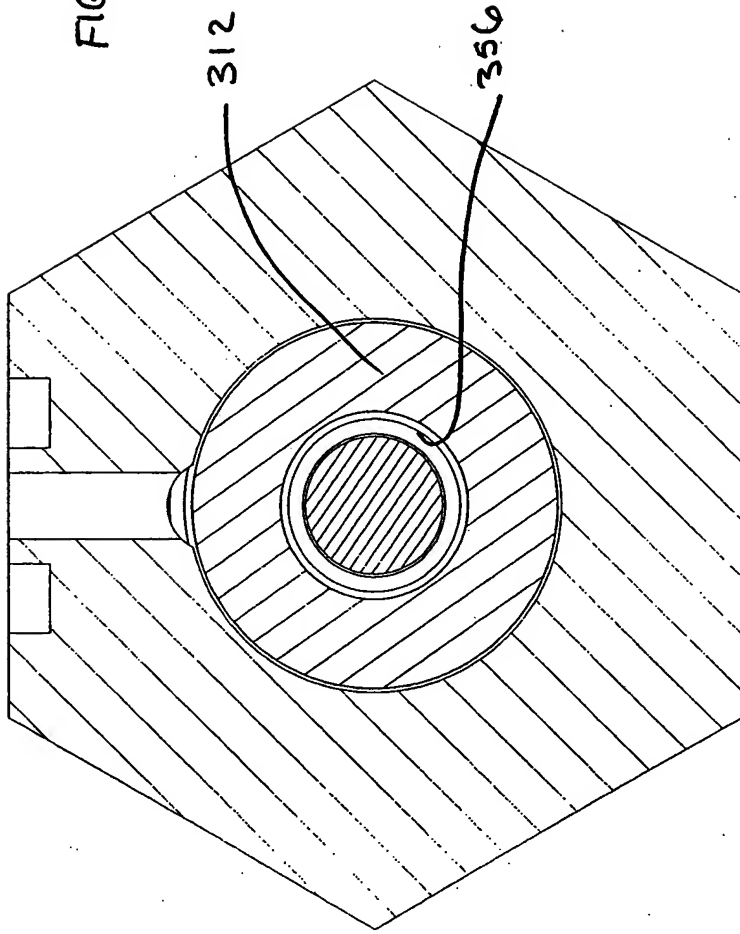


FIG. 31



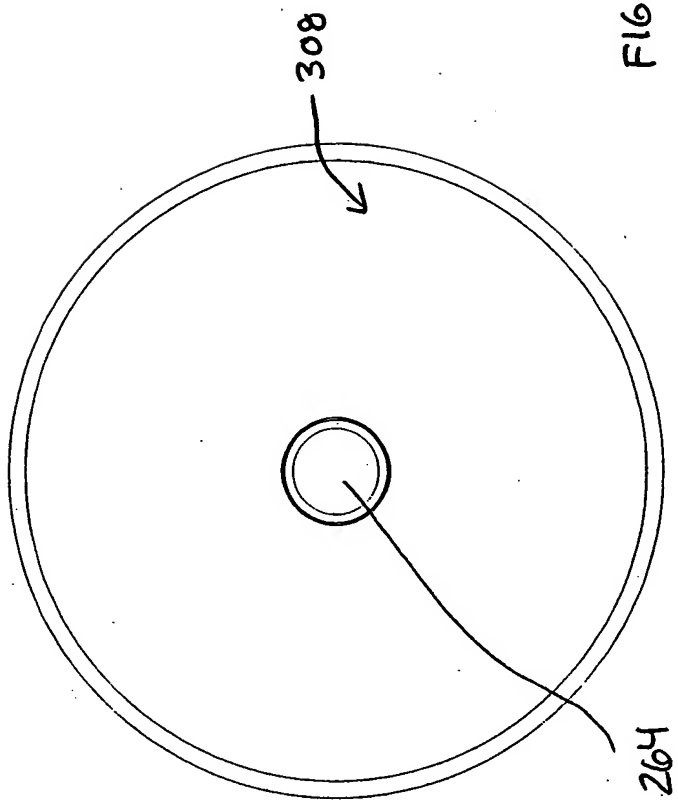


FIG. 32

FIG. 33

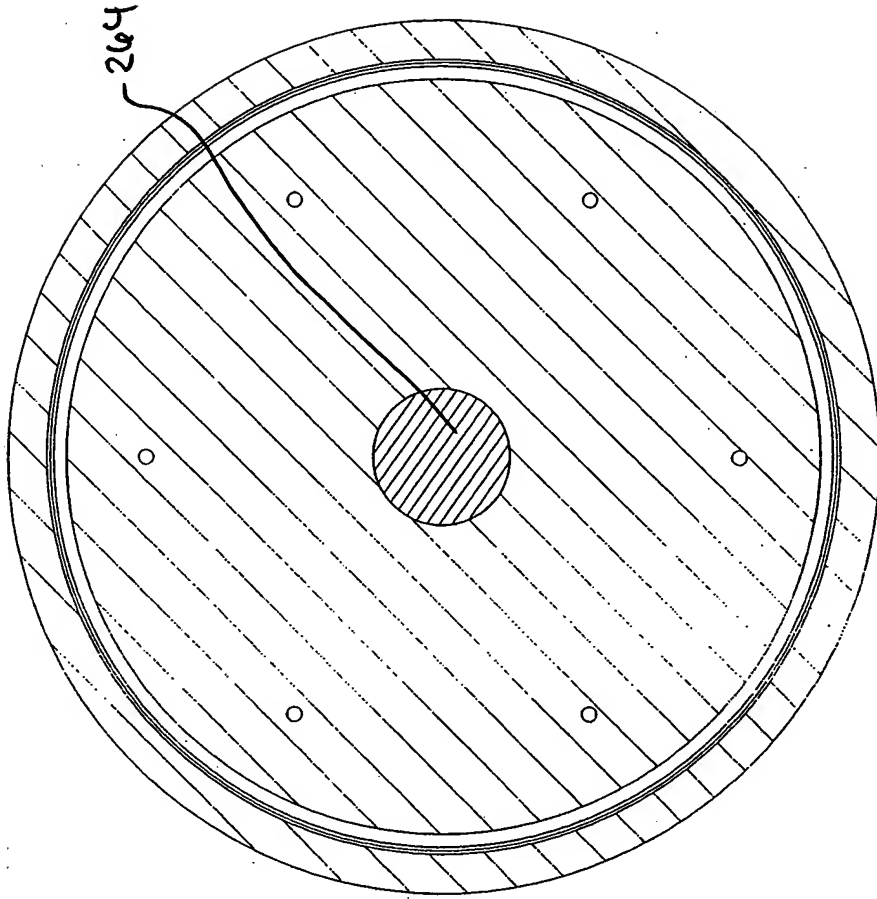
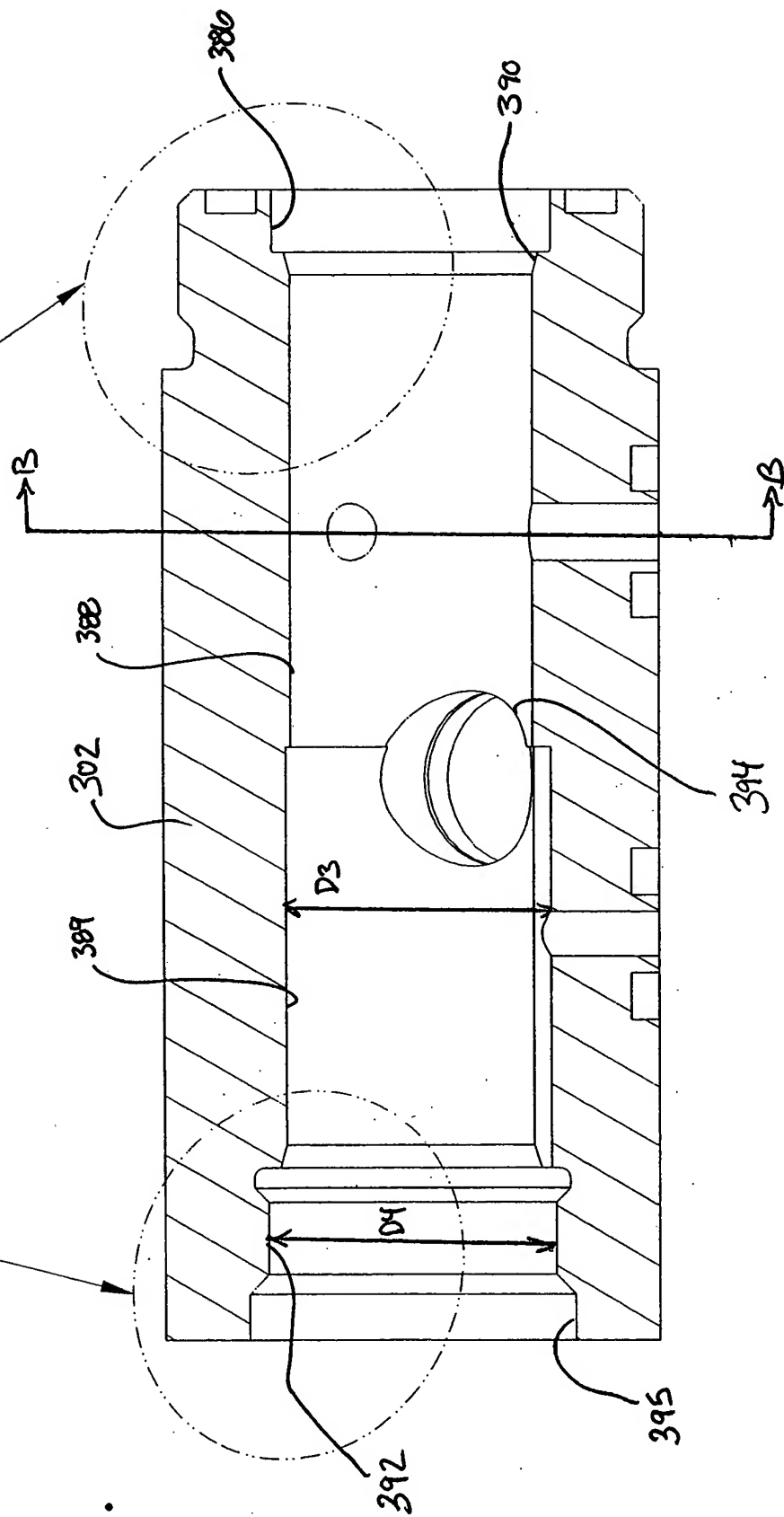


FIG. 34A

FIG. 34B



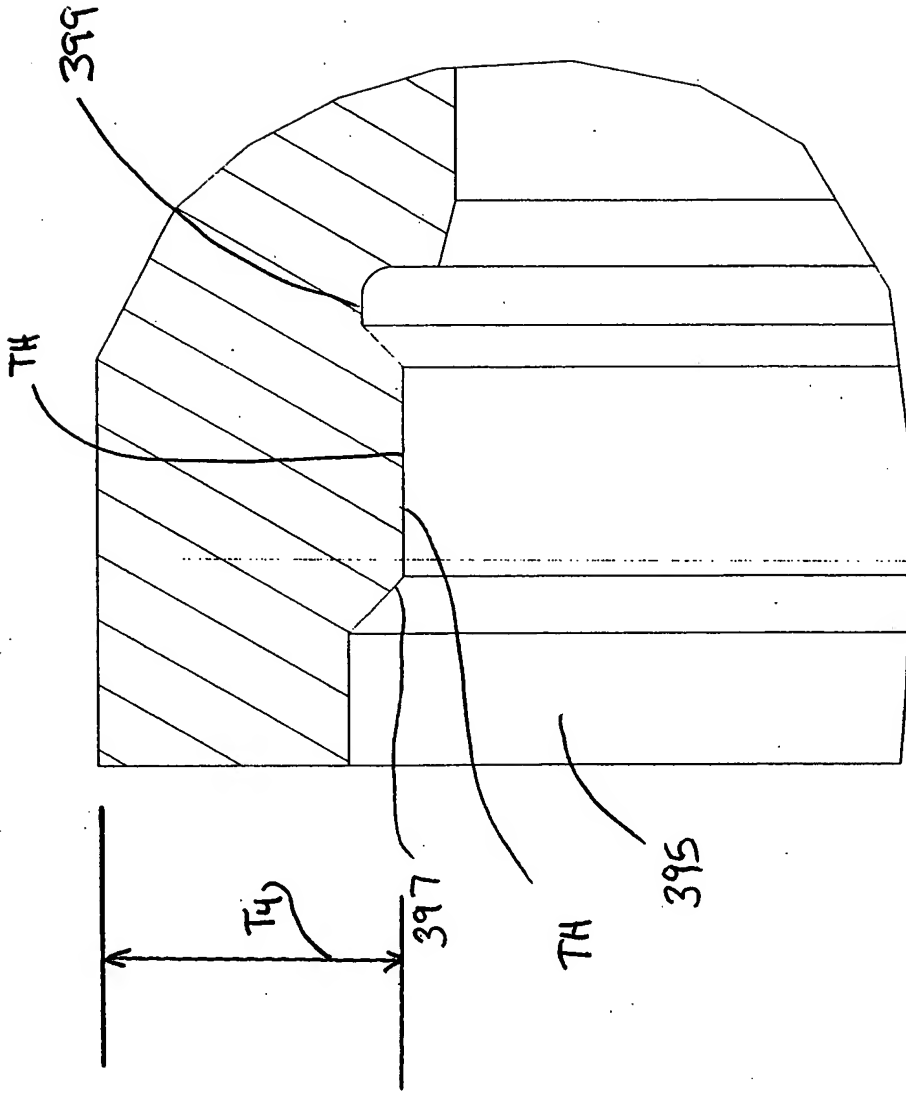


FIG. 34A

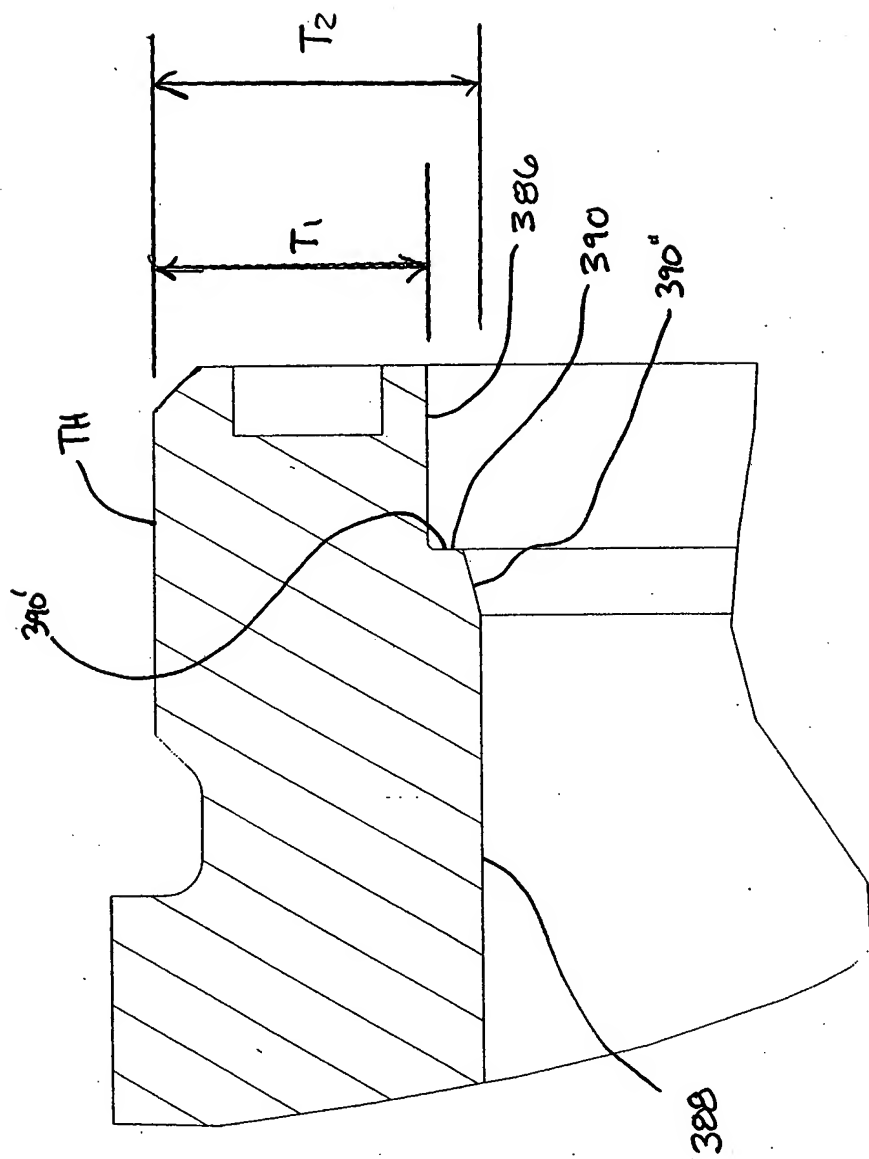


FIG. 34B

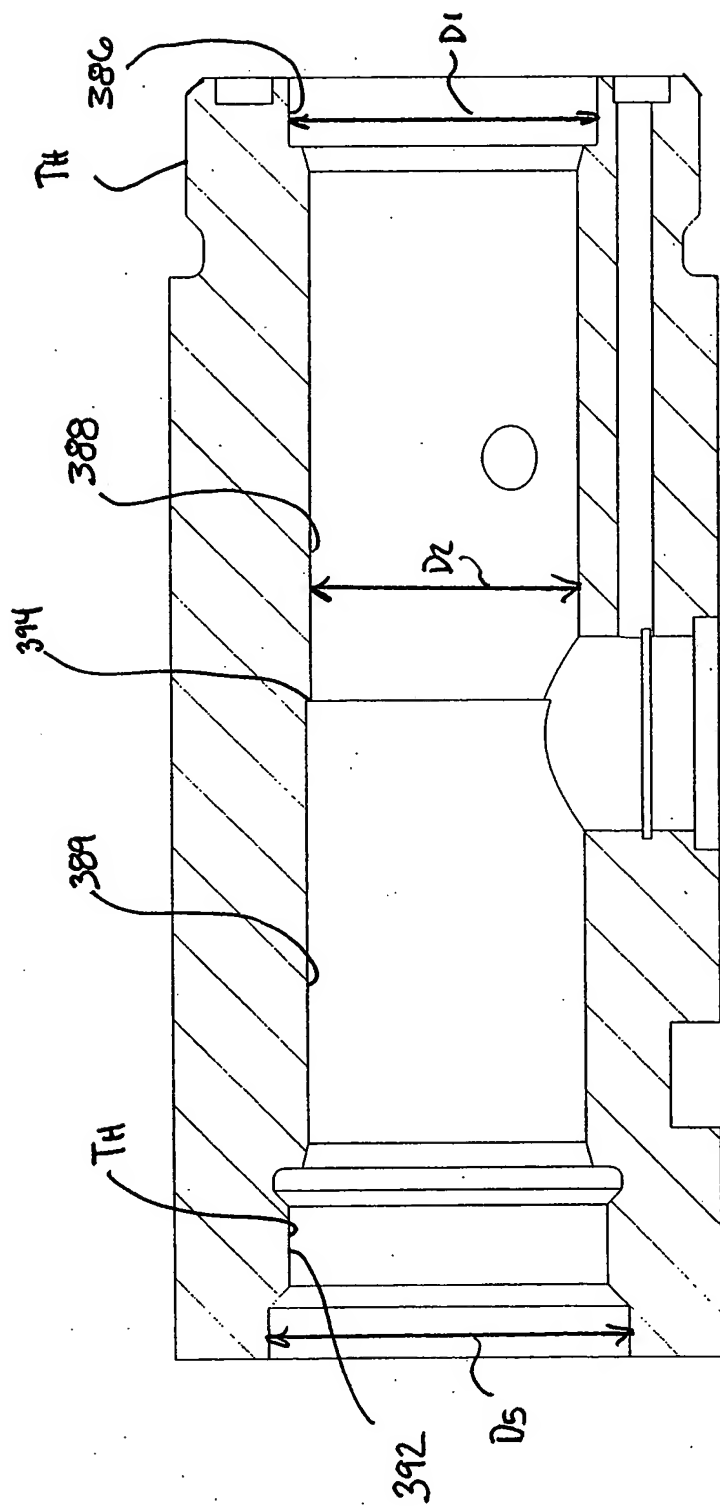


FIG. 35

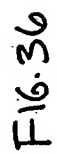


FIG. 37

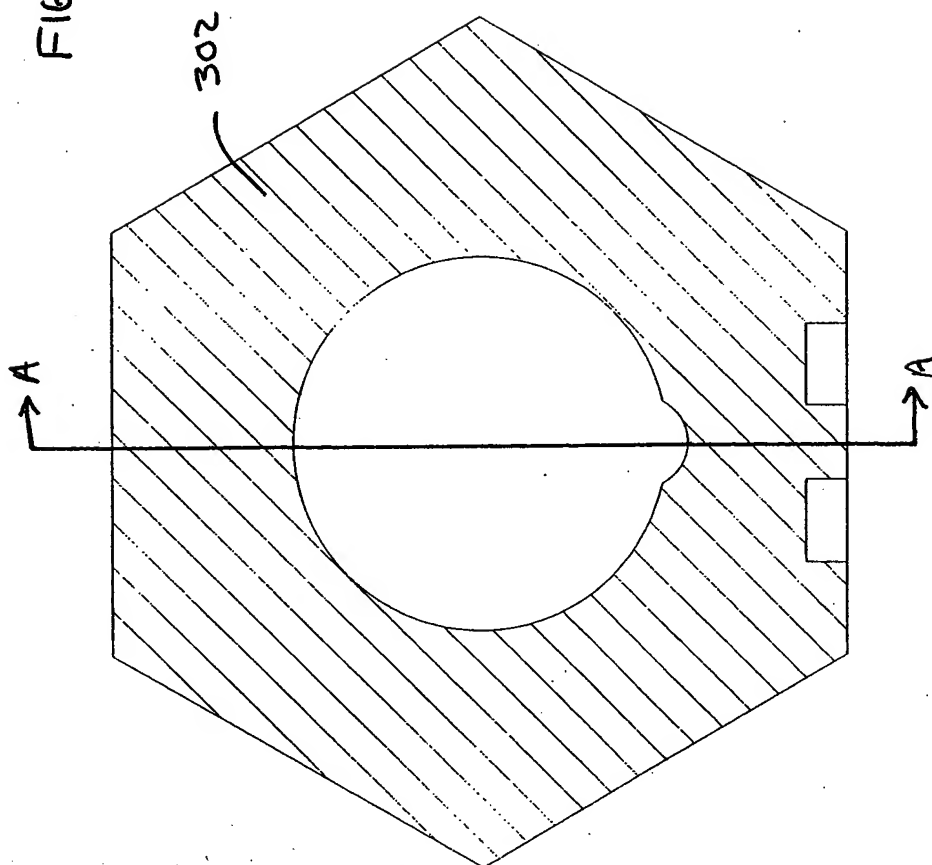
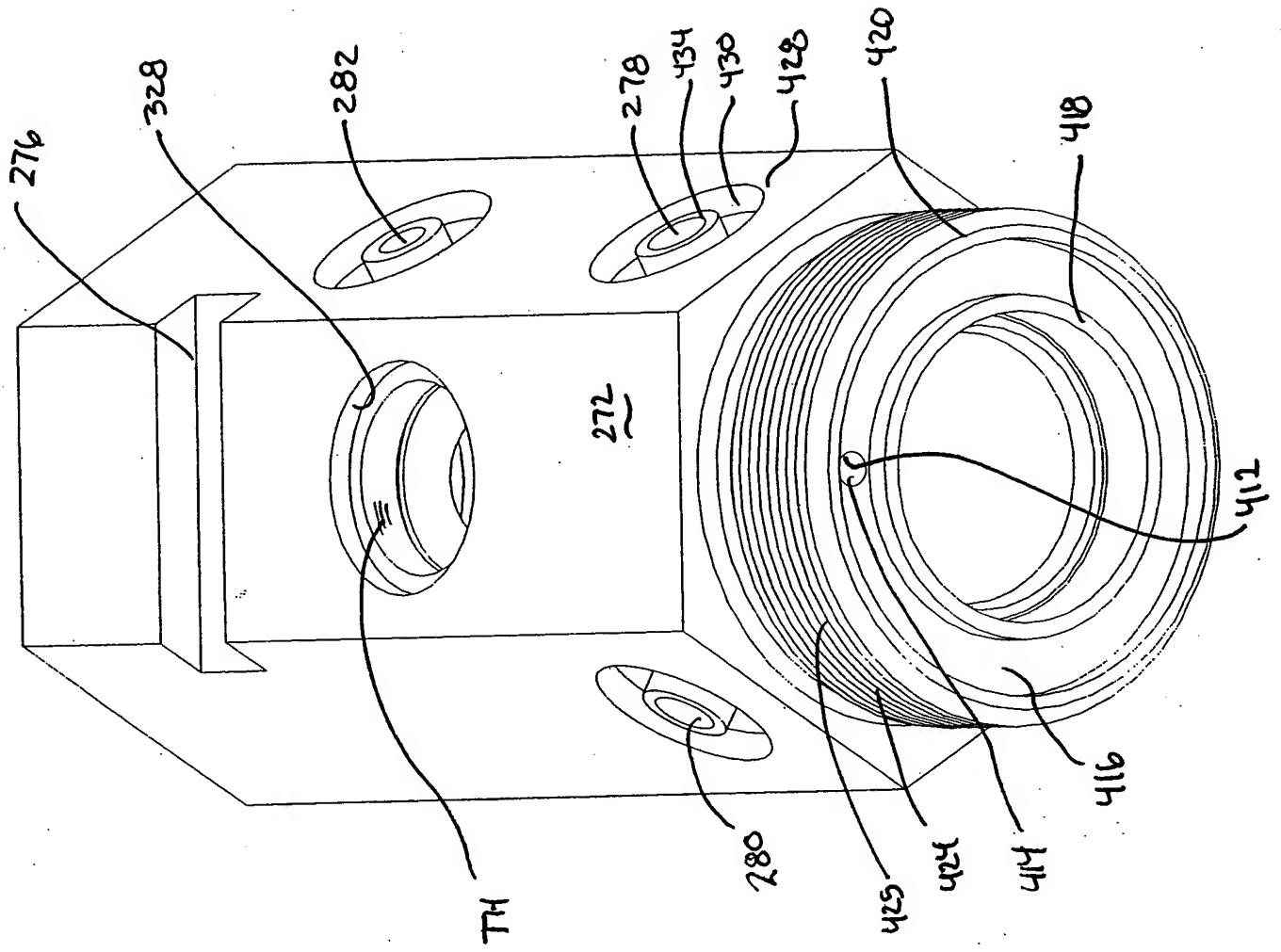
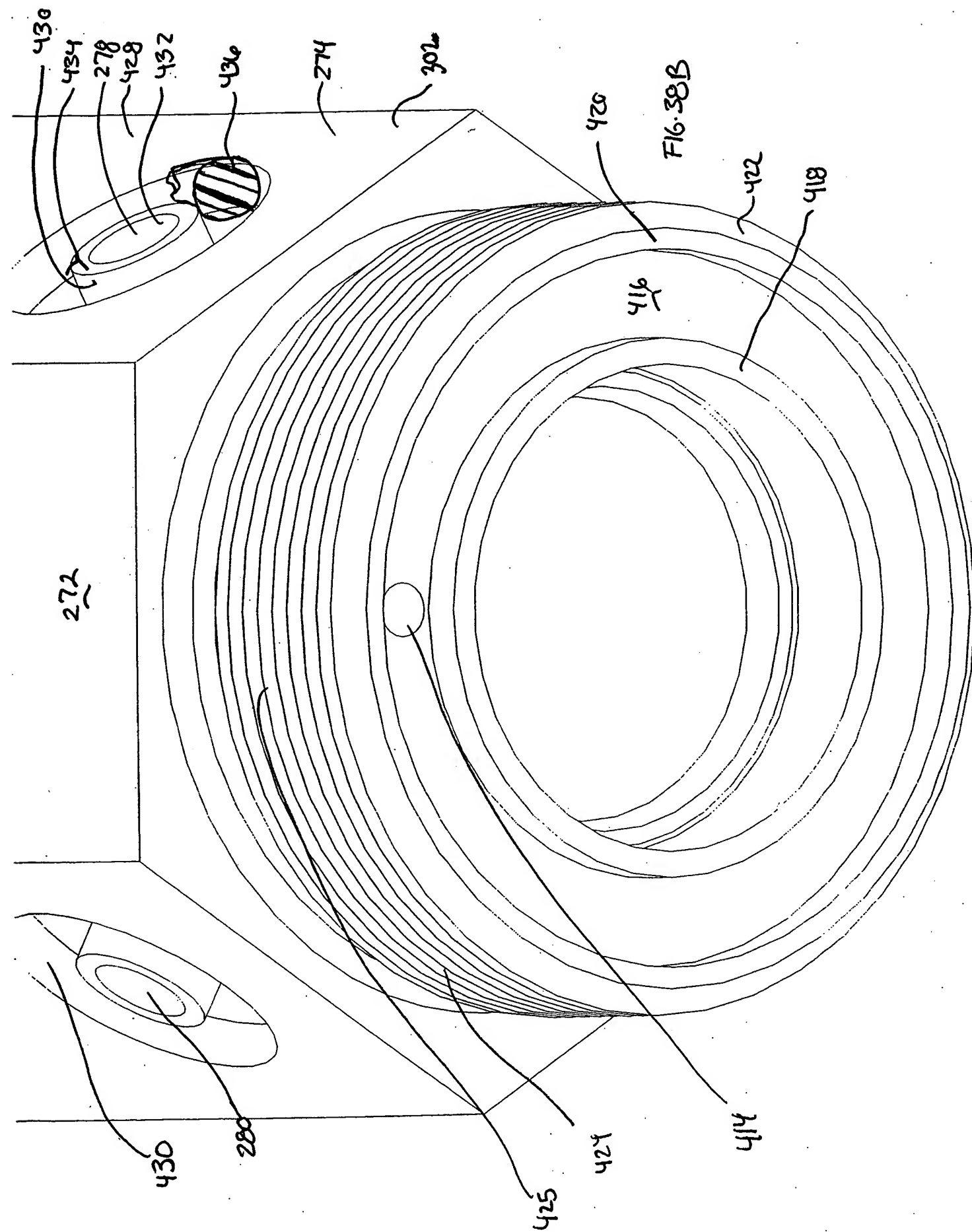


FIG. 39A





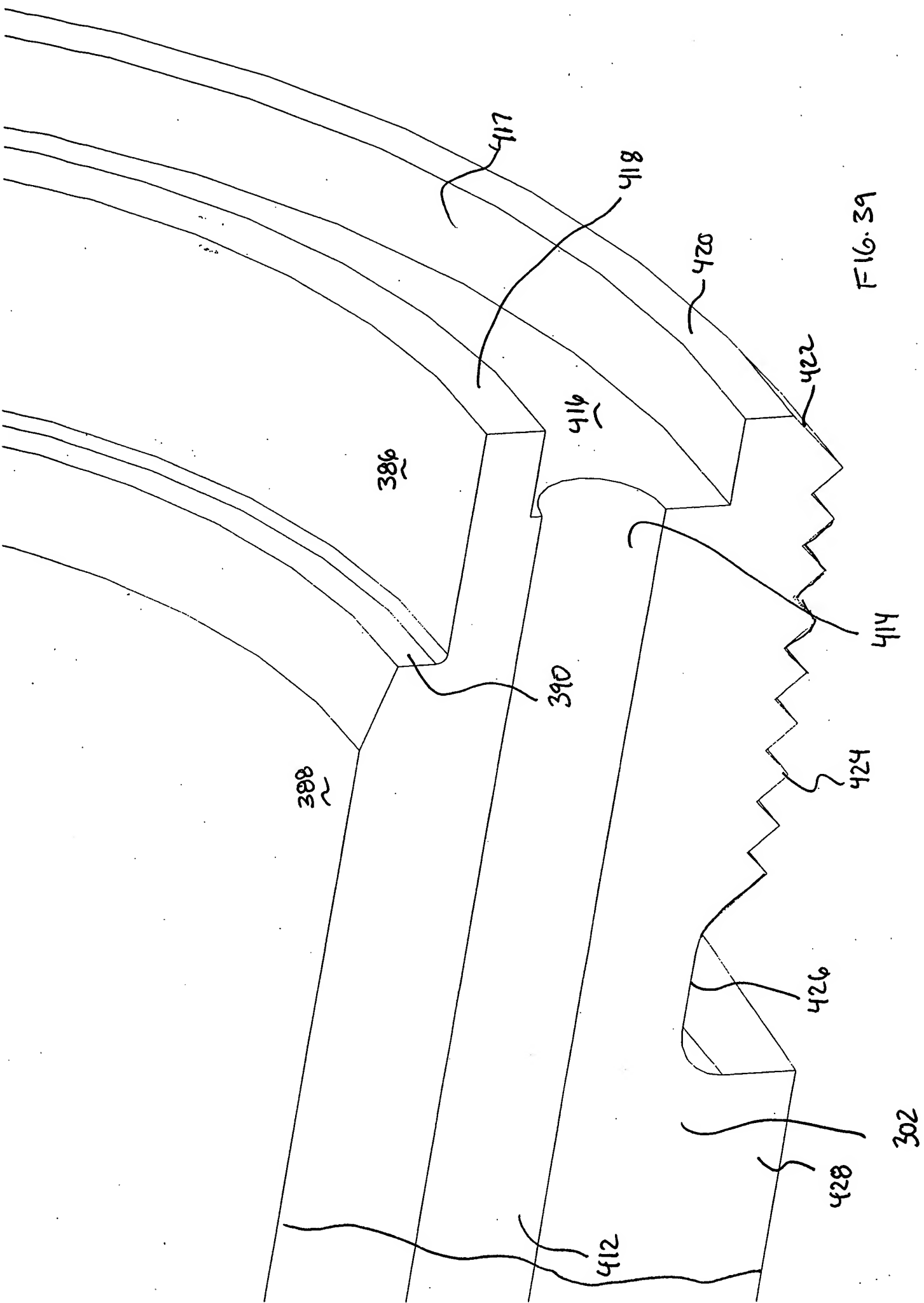


FIG. 39

FIG. 40

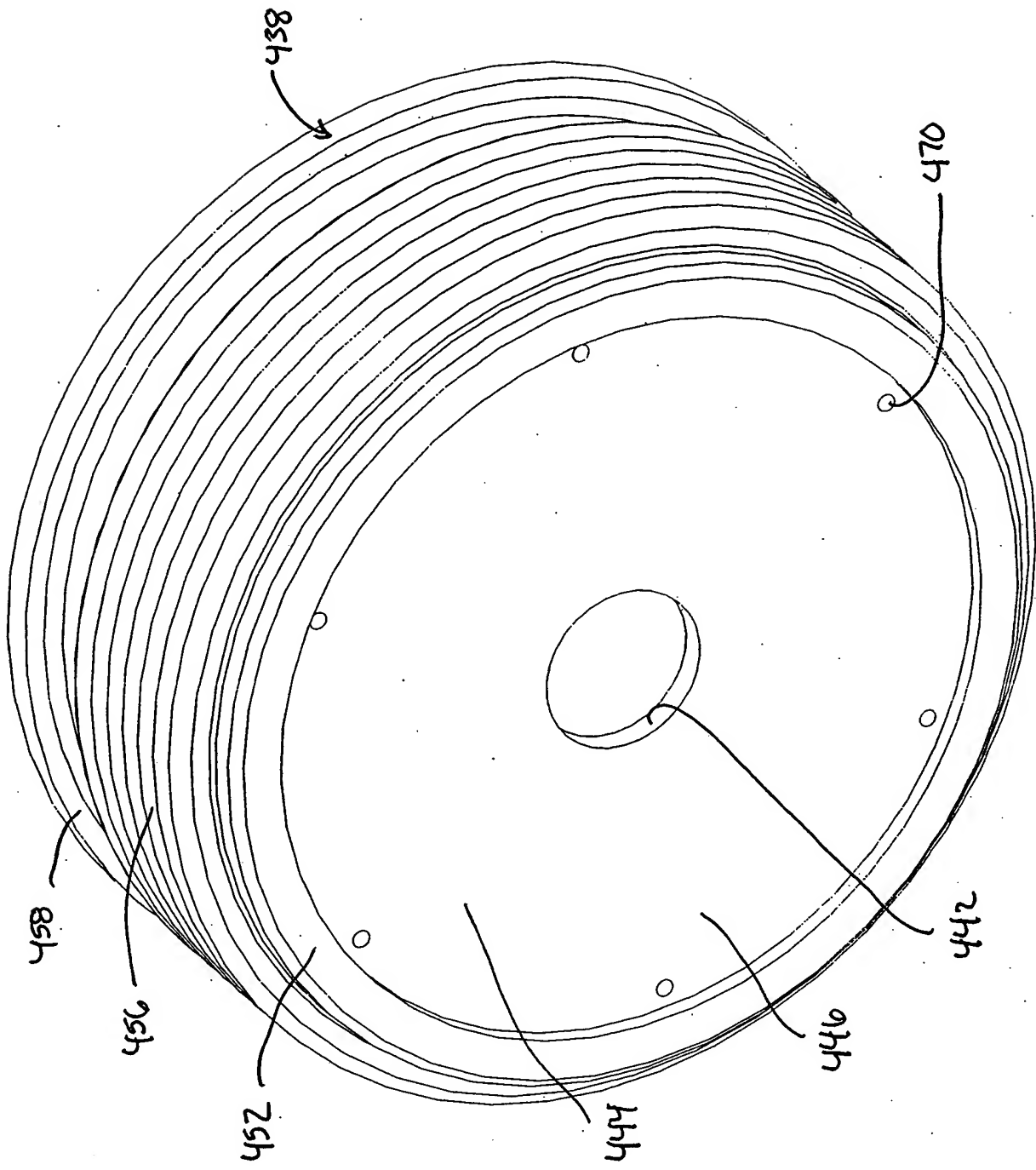
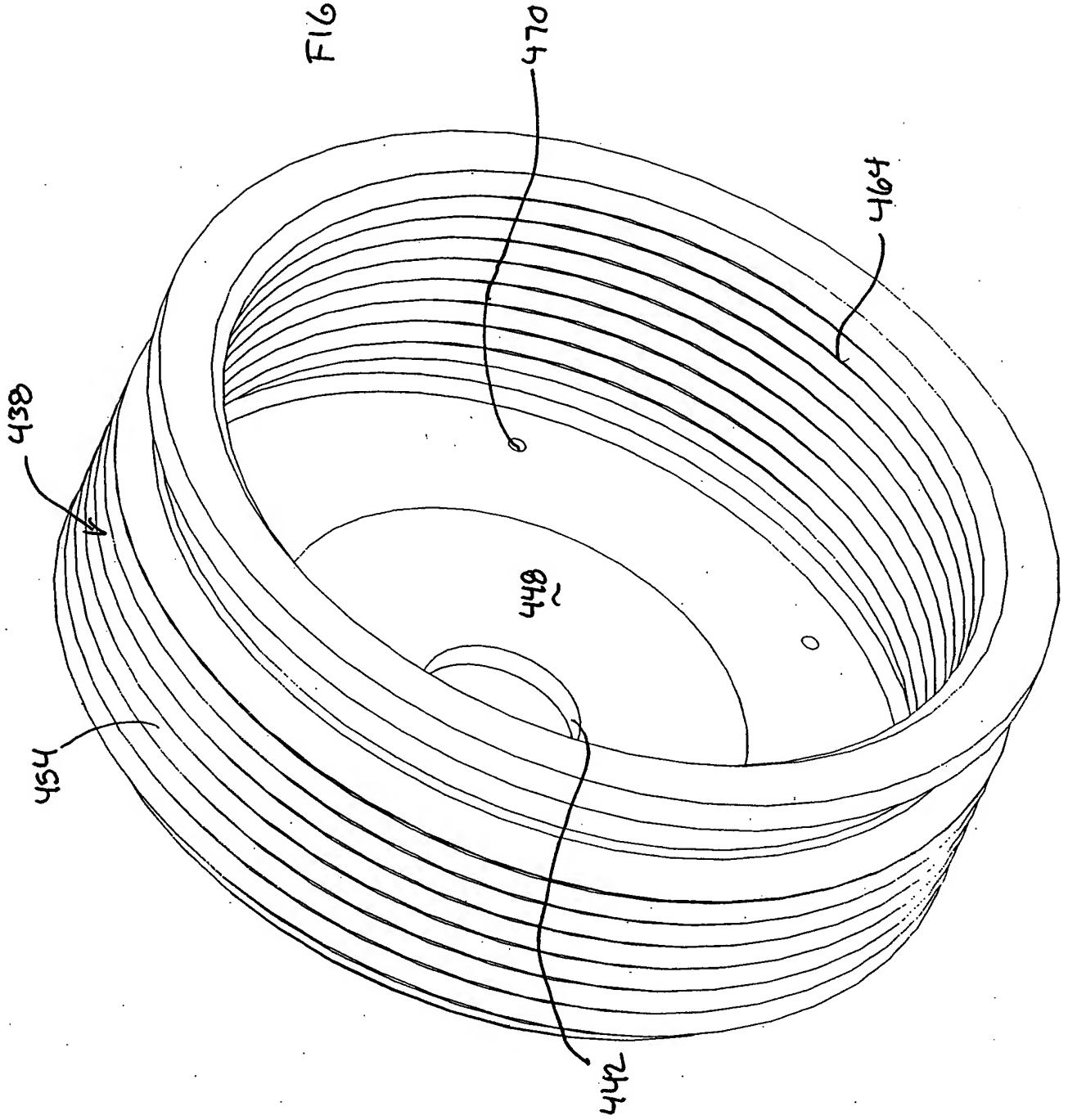
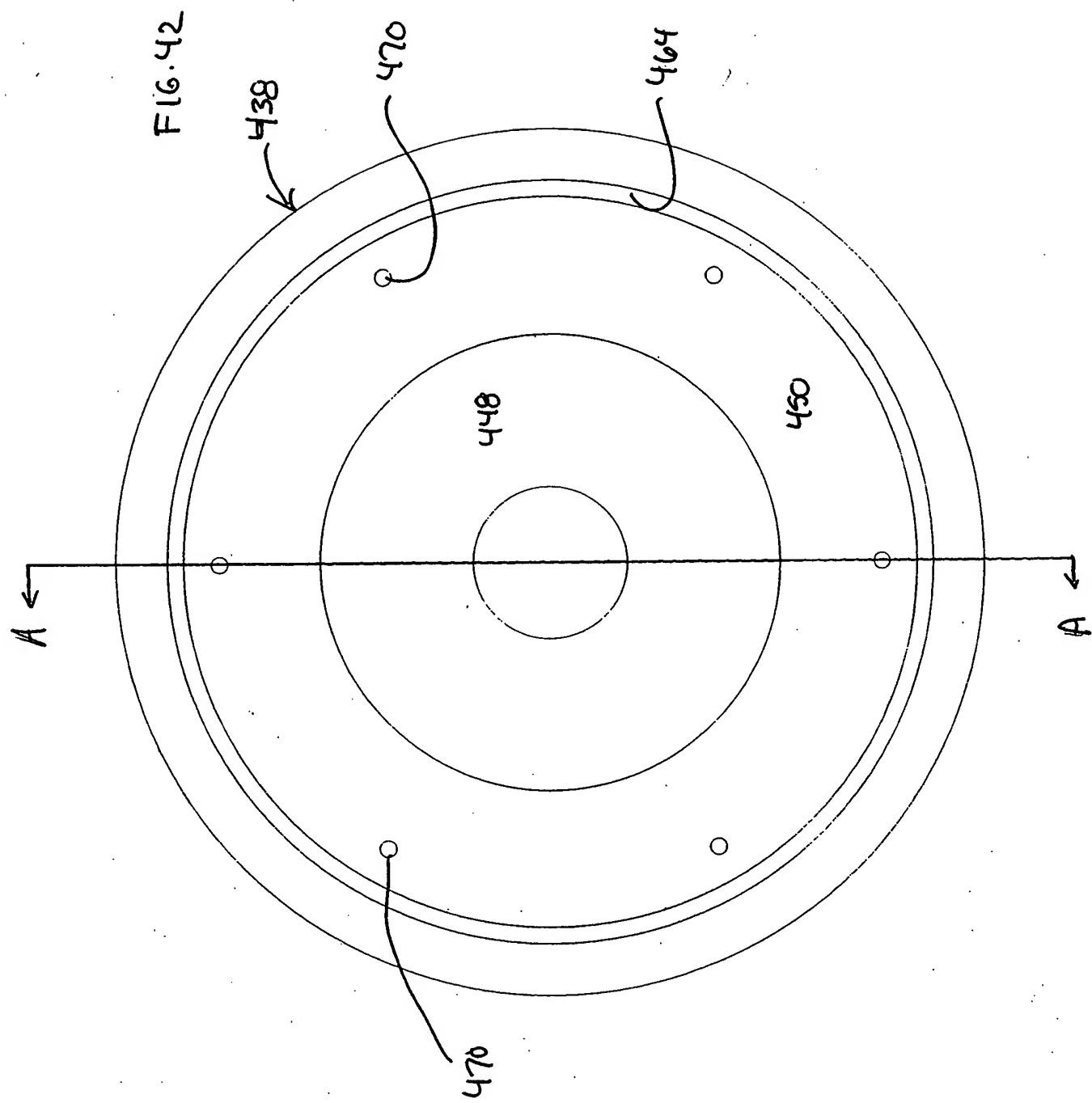


FIG. 41





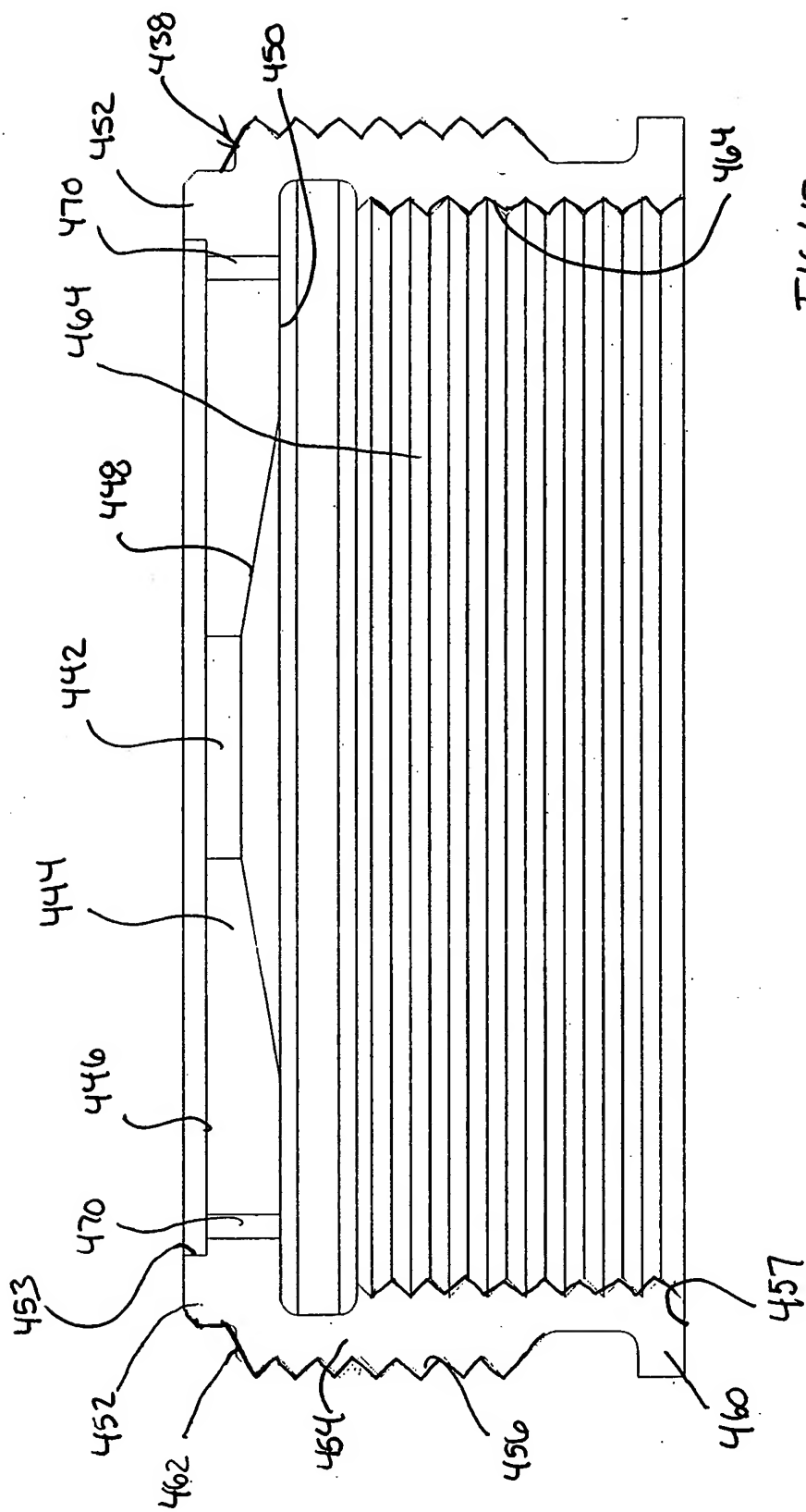


FIG. 43

FIG. 44

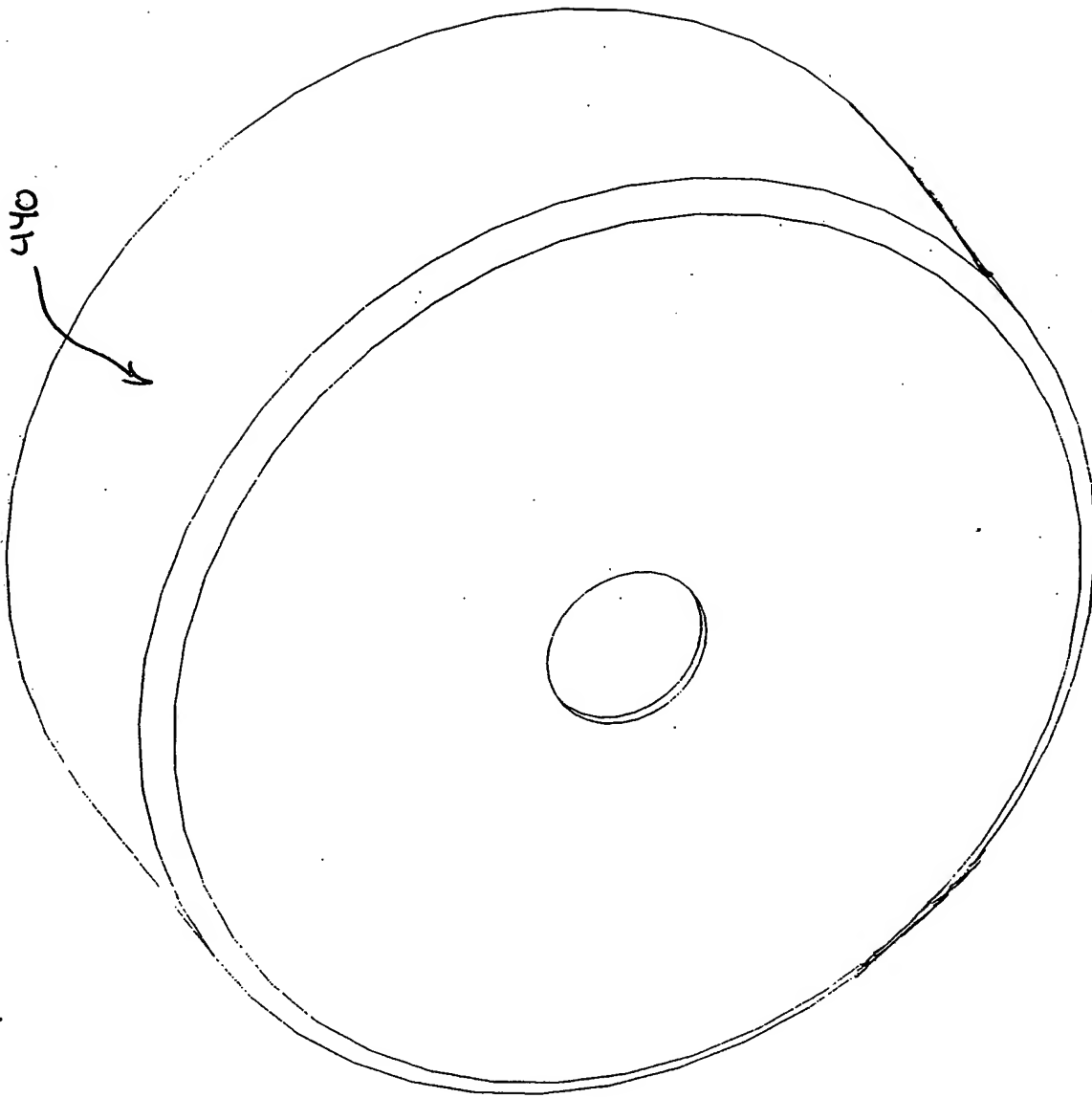


FIG. 45

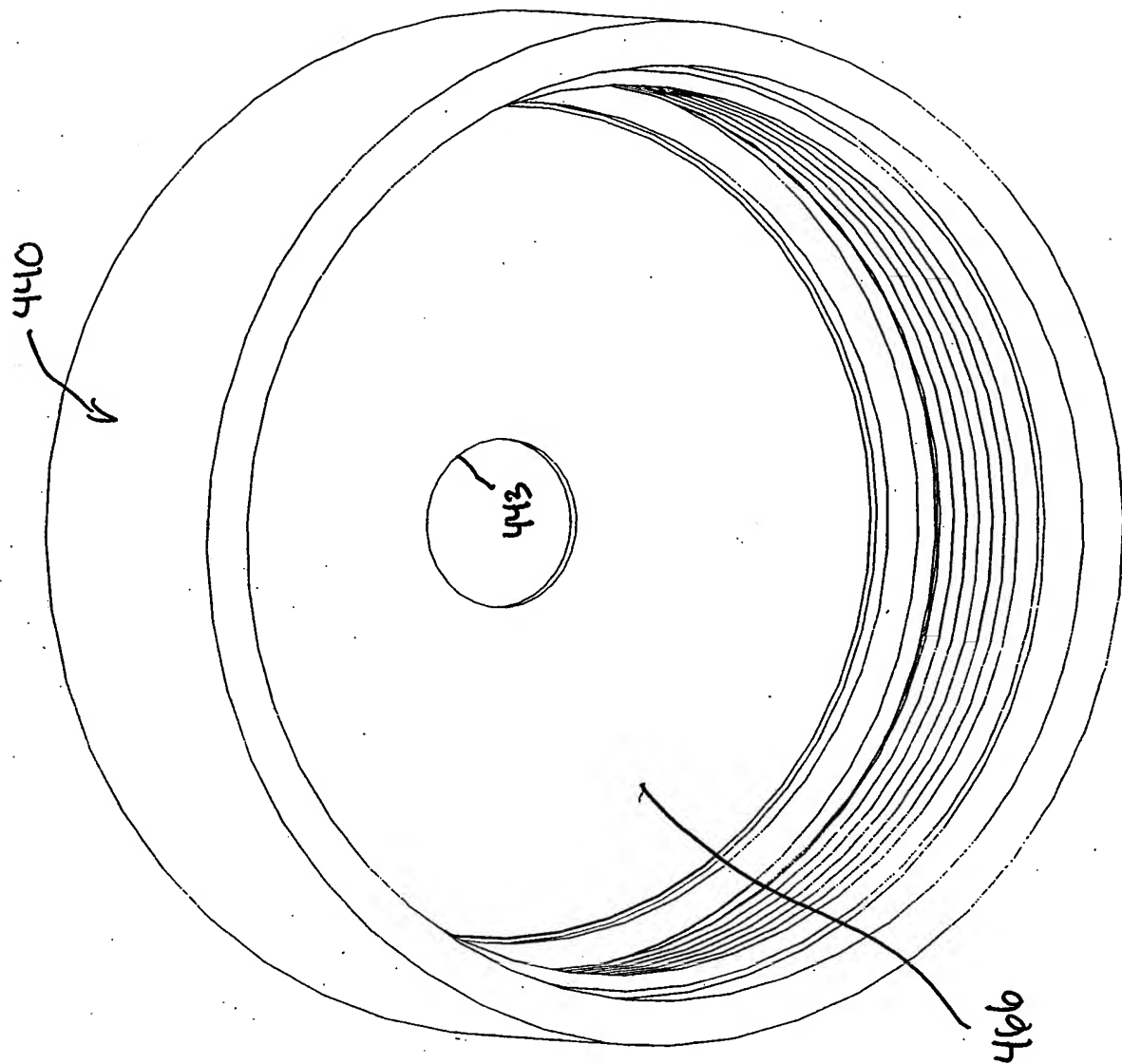
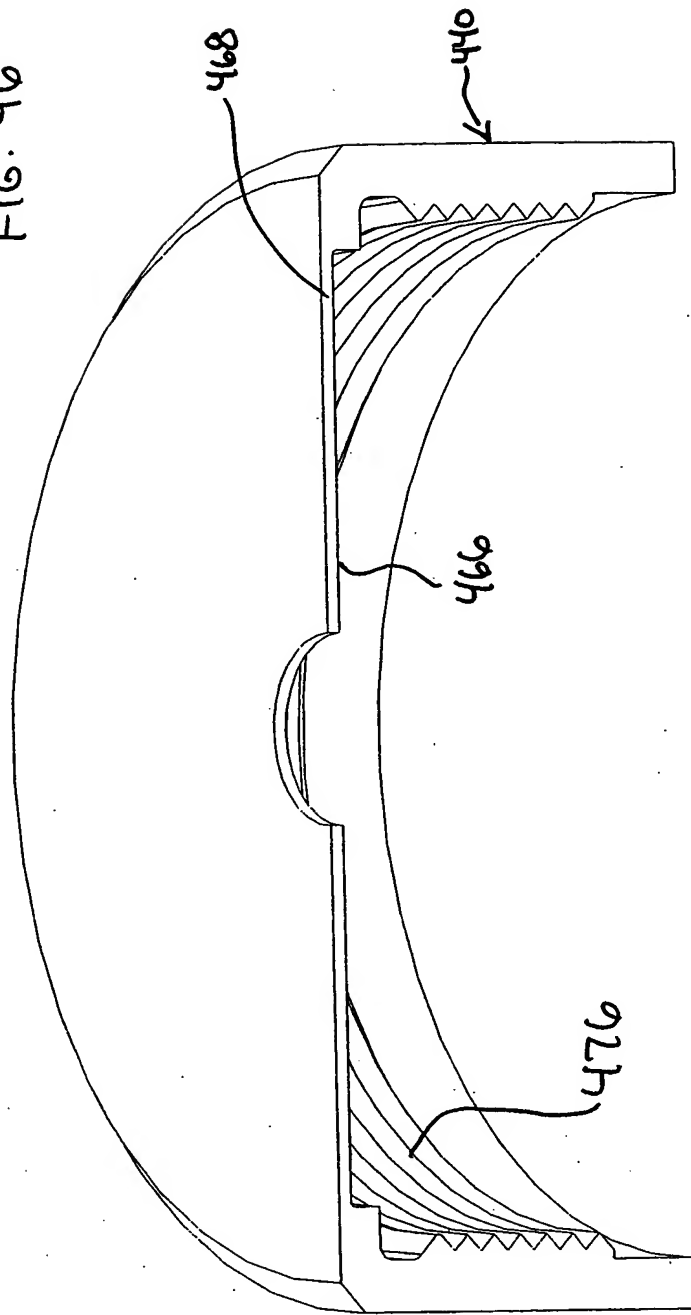


FIG. 46



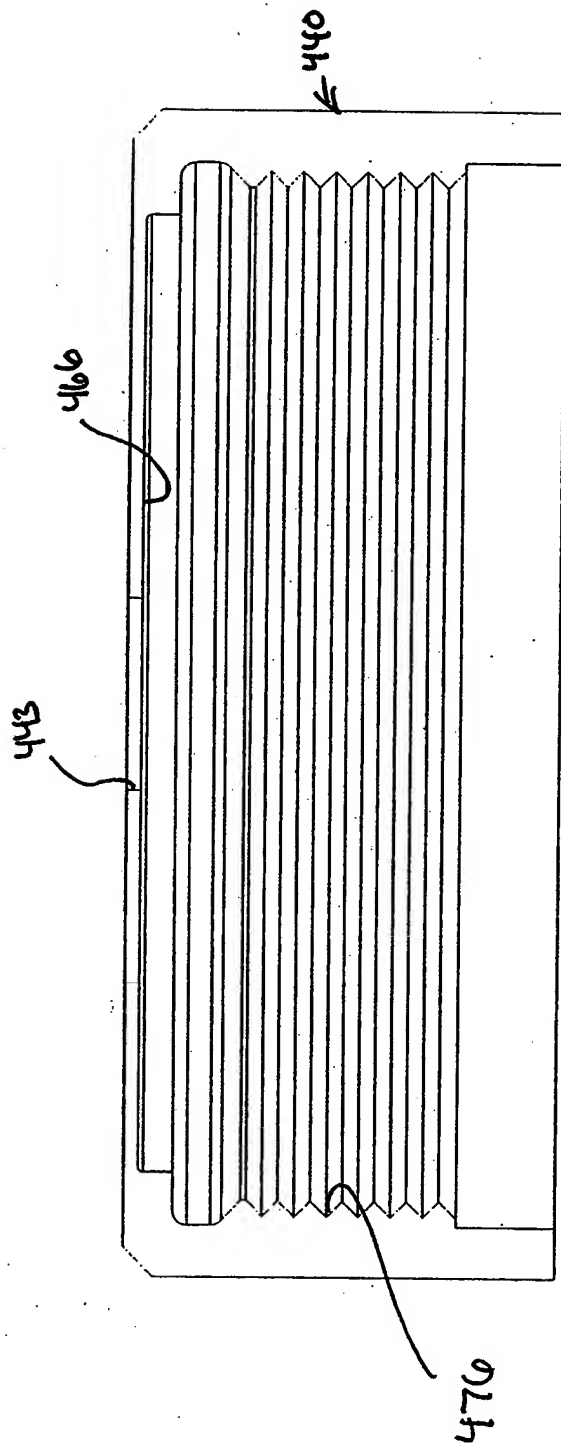
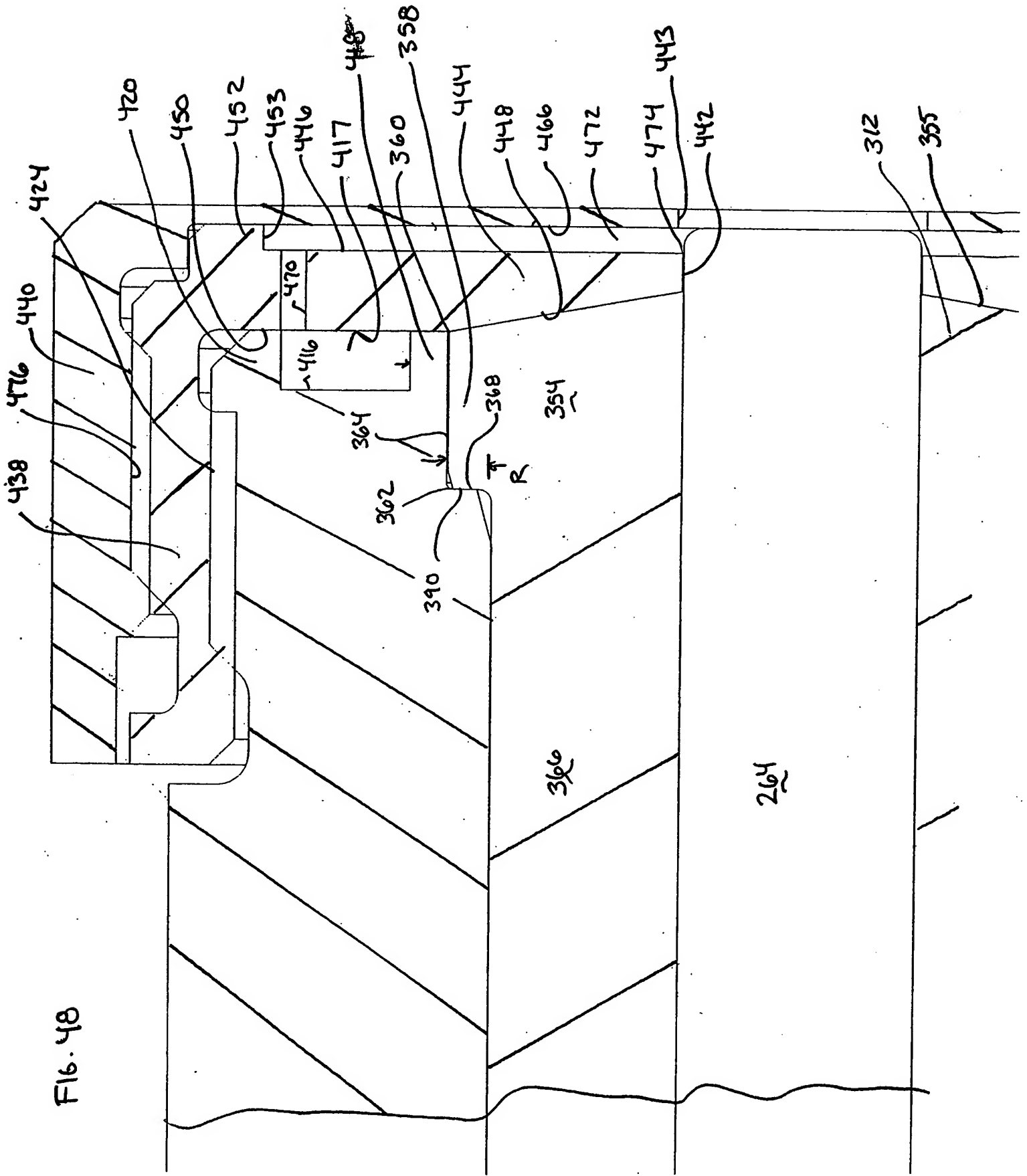
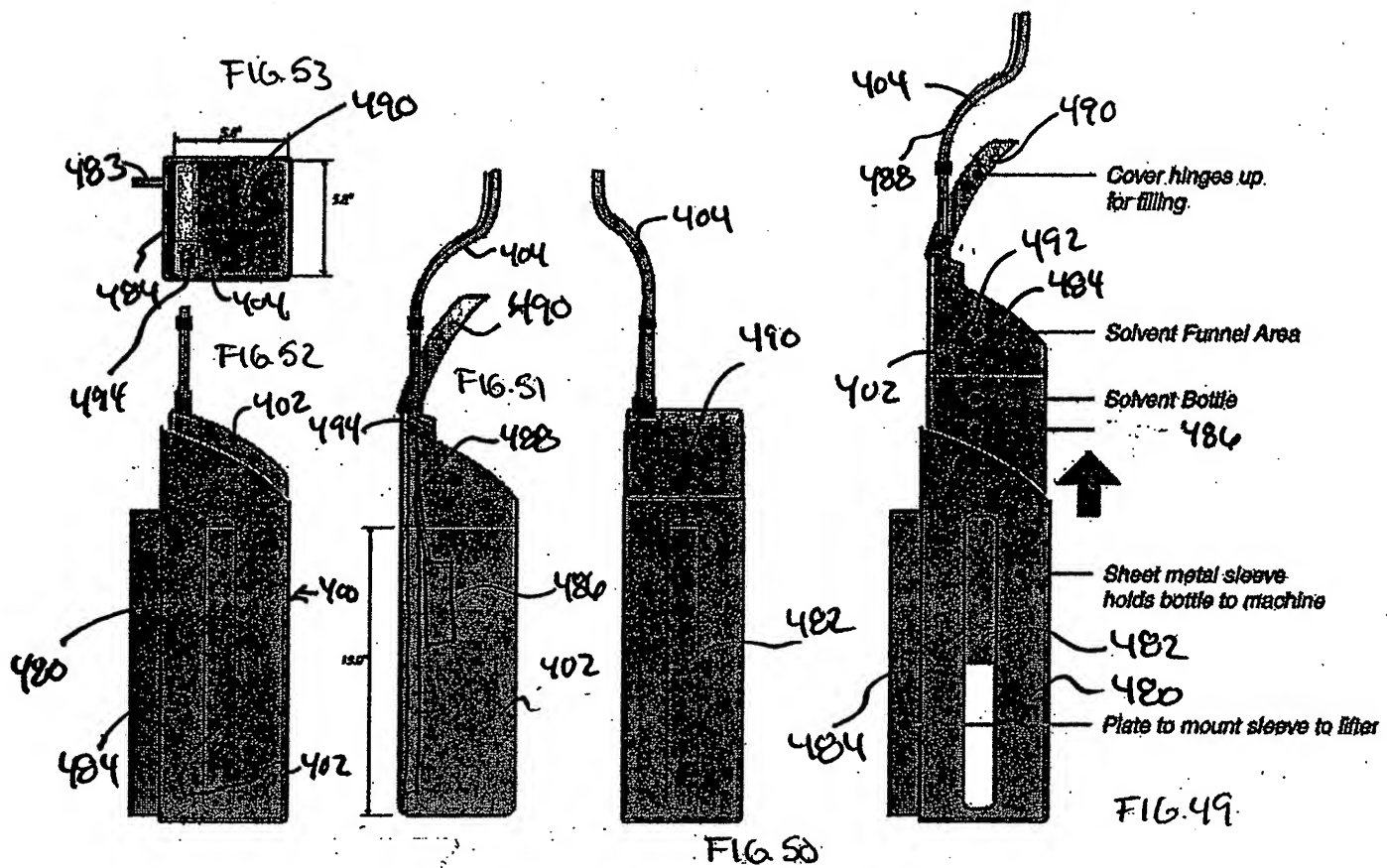


FIG. 47

FIG. 48





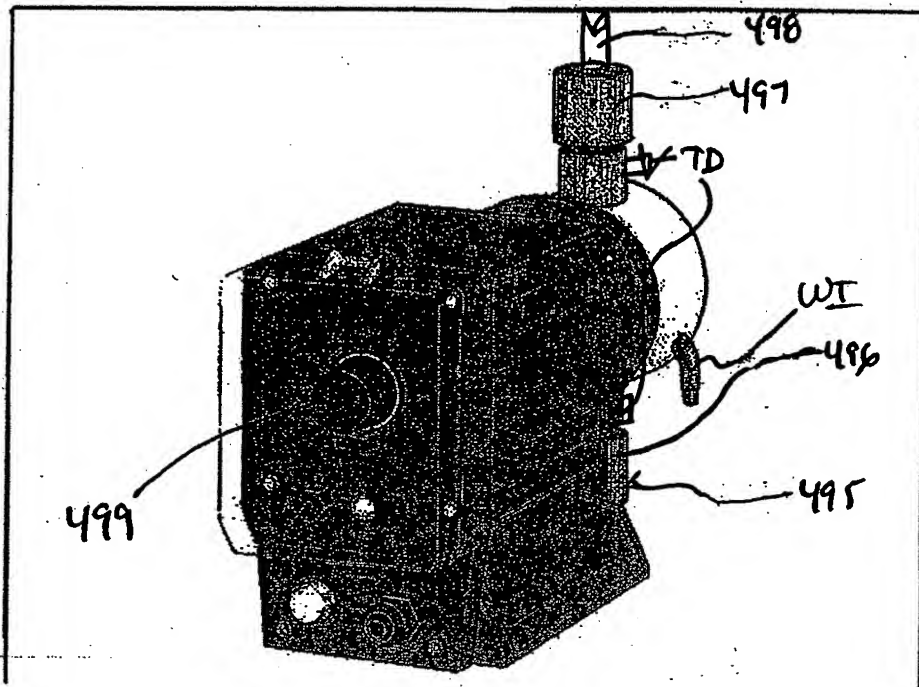
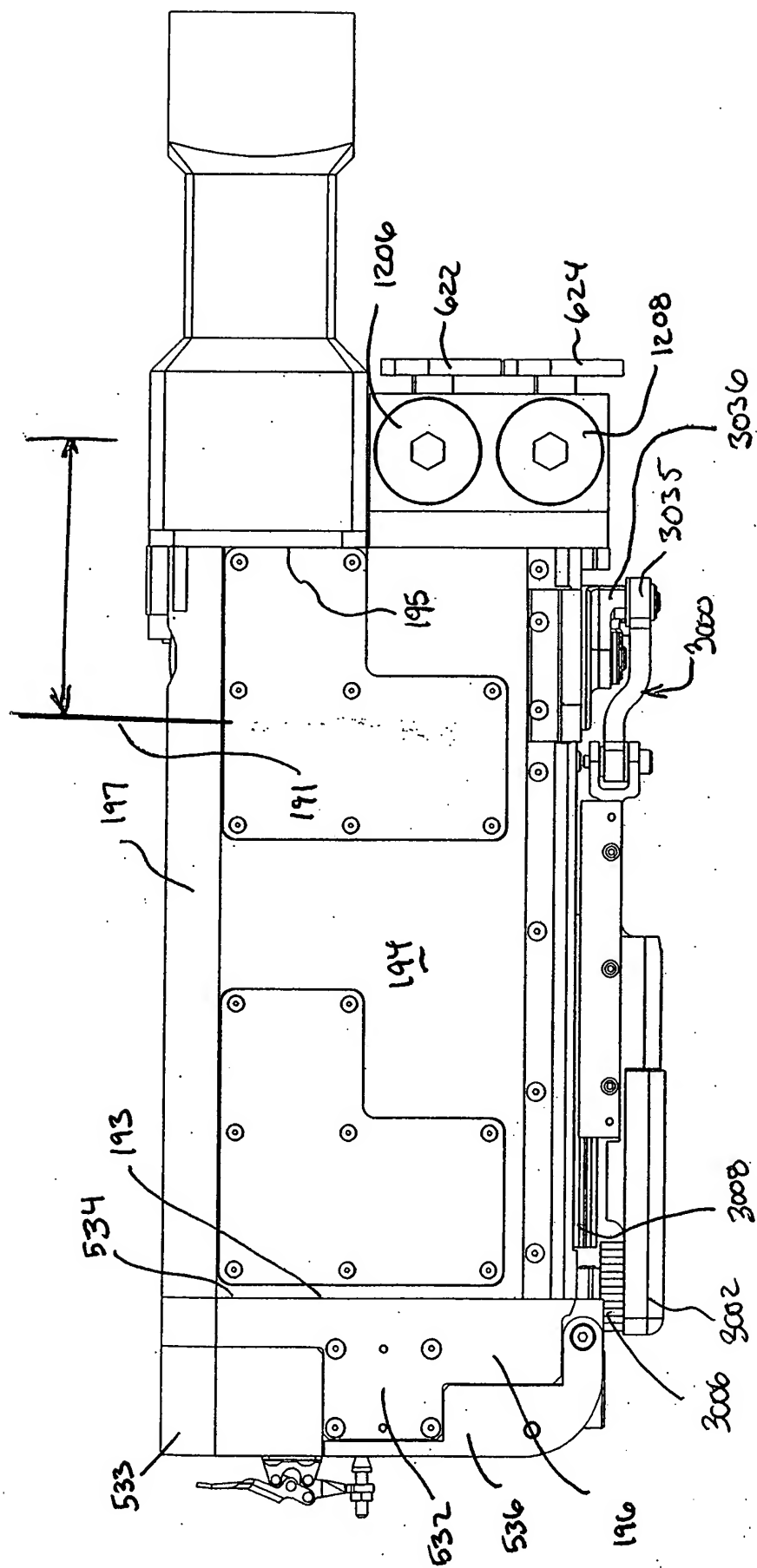


FIG. 54



55.913

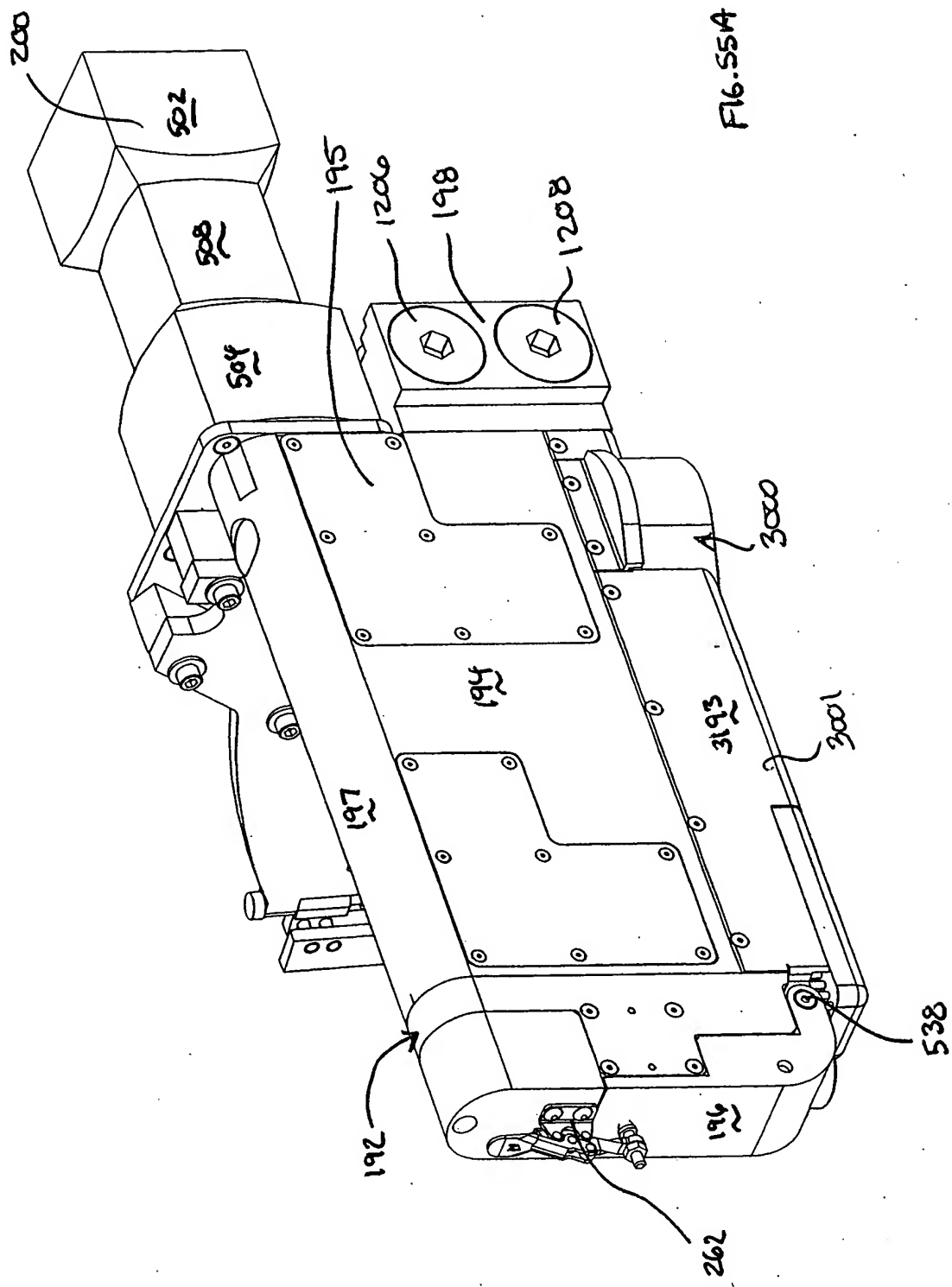
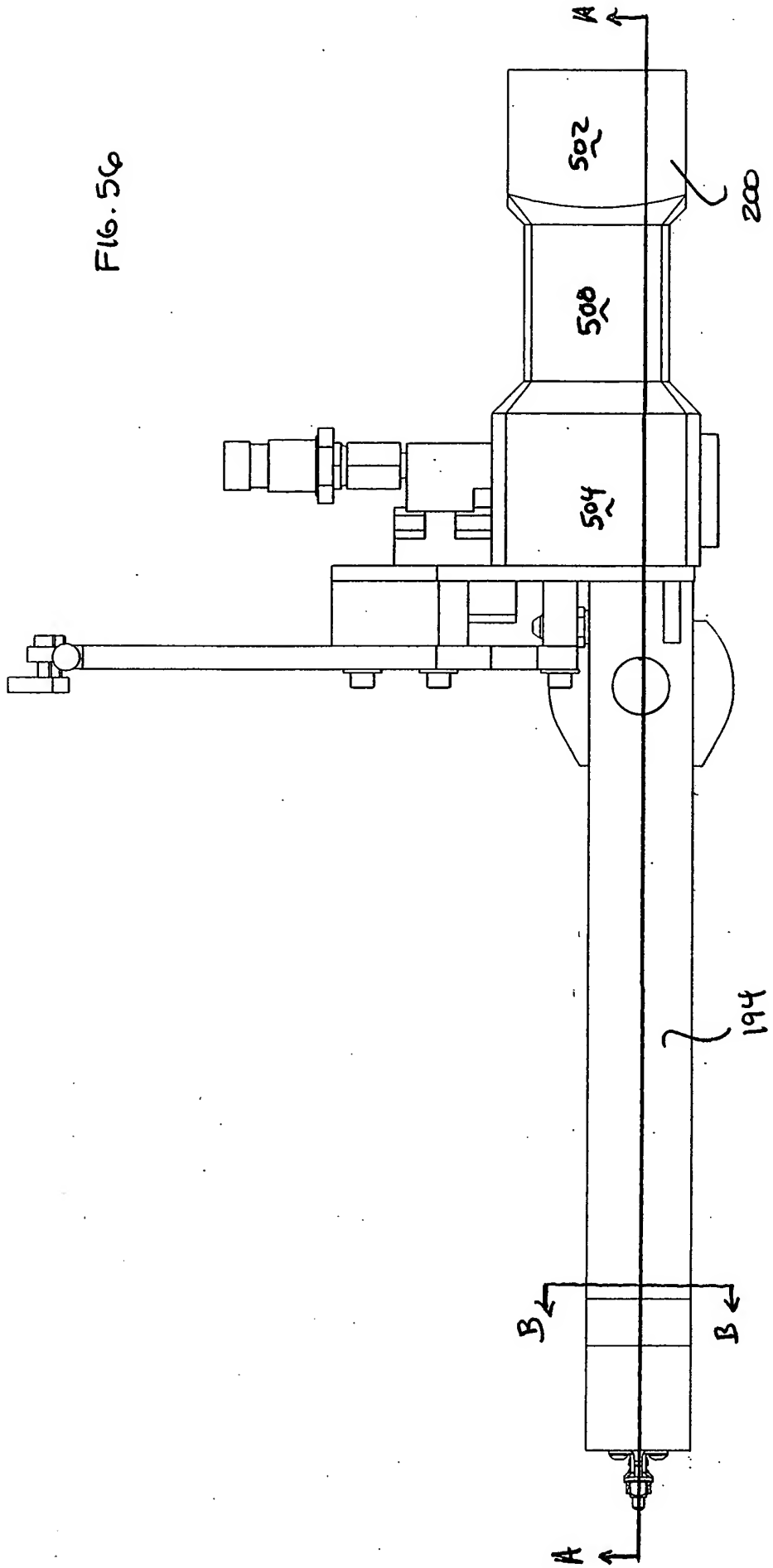


FIG. 55A

FIG. 56



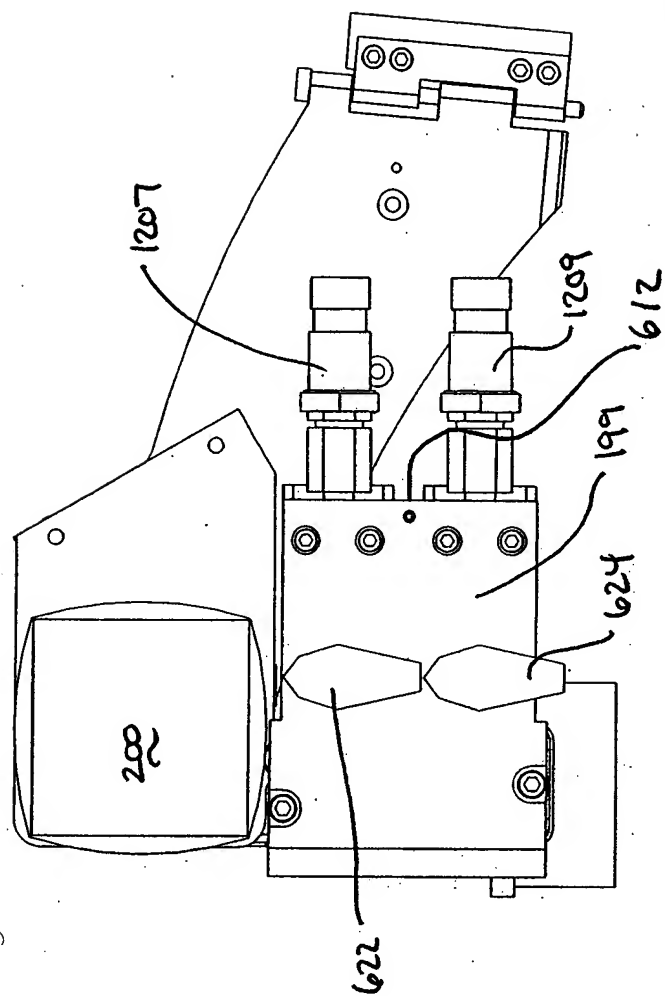


FIG. 57

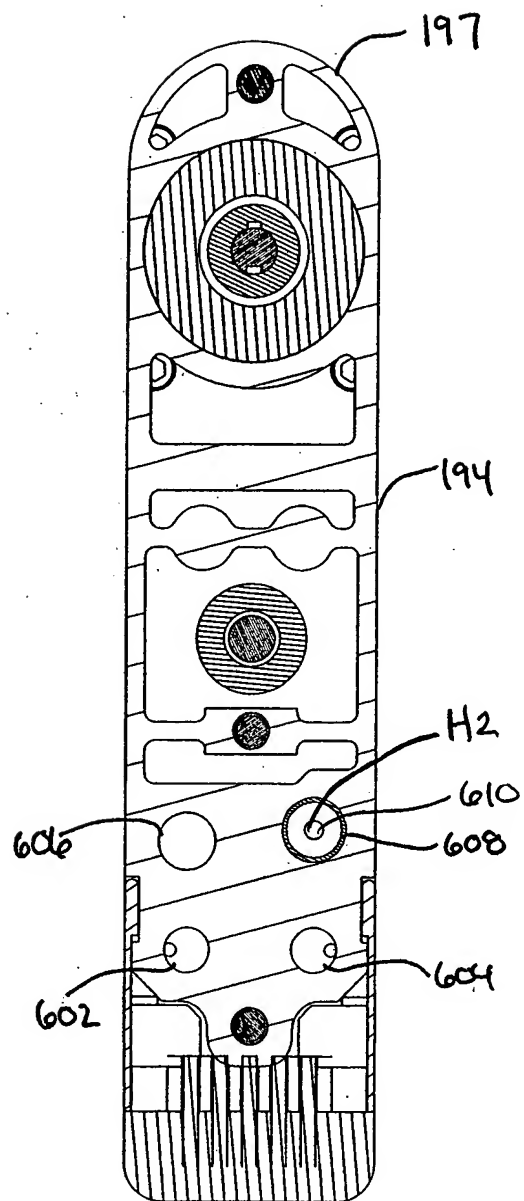


FIG. 58

FIG. 59

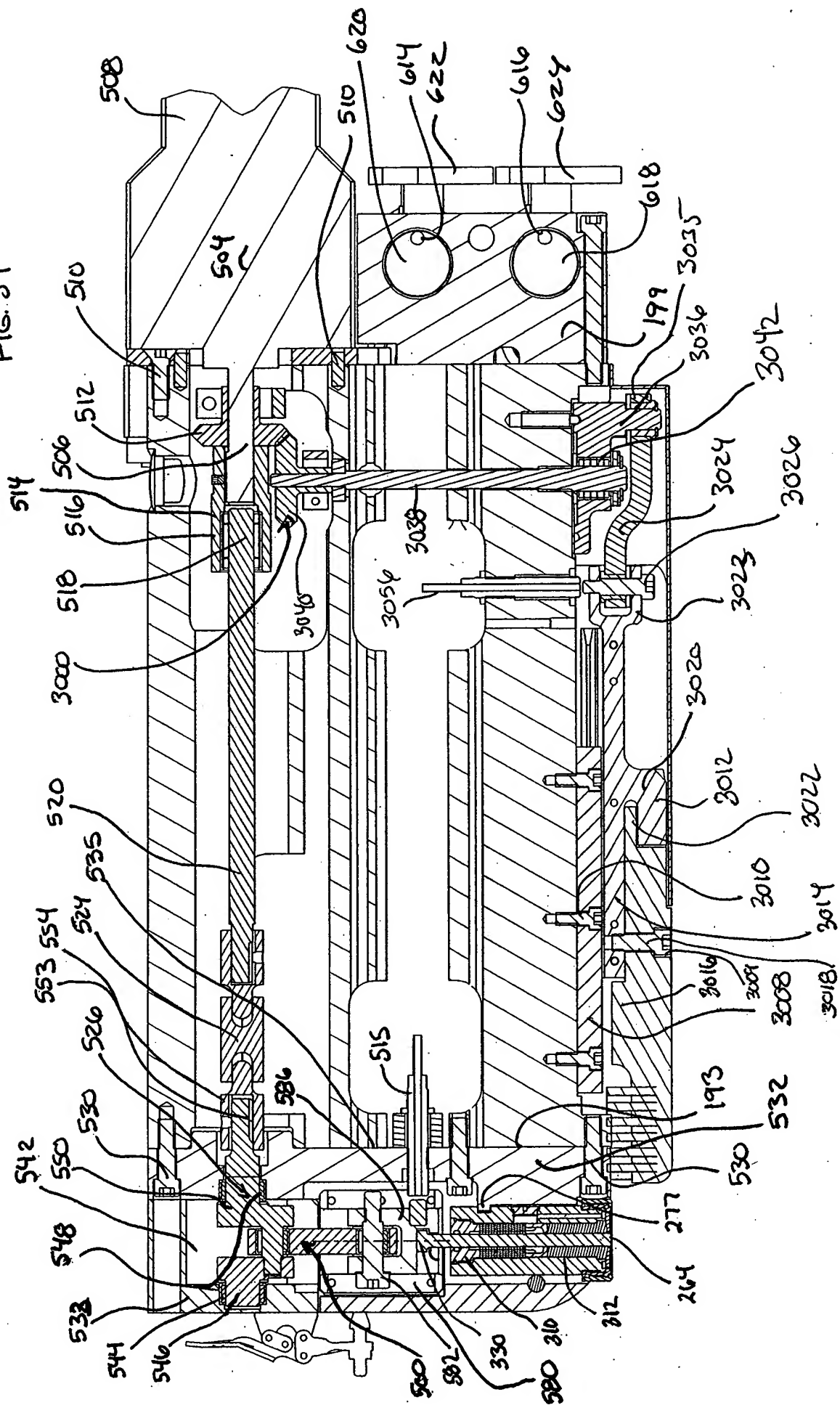


FIG. 60

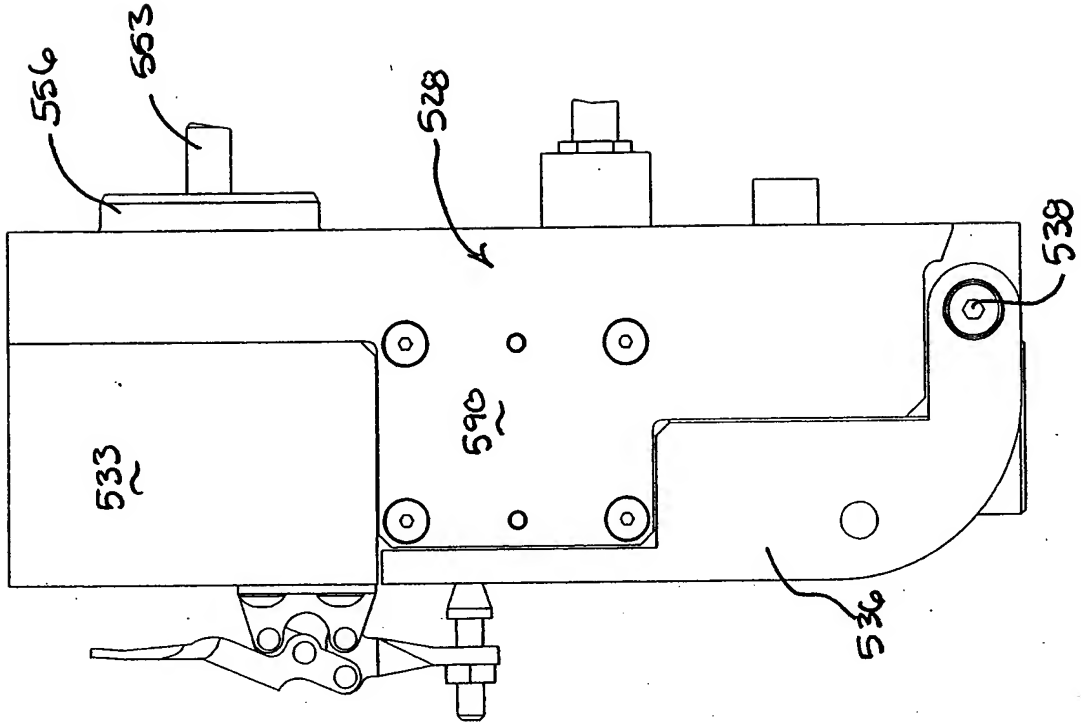


FIG. 61

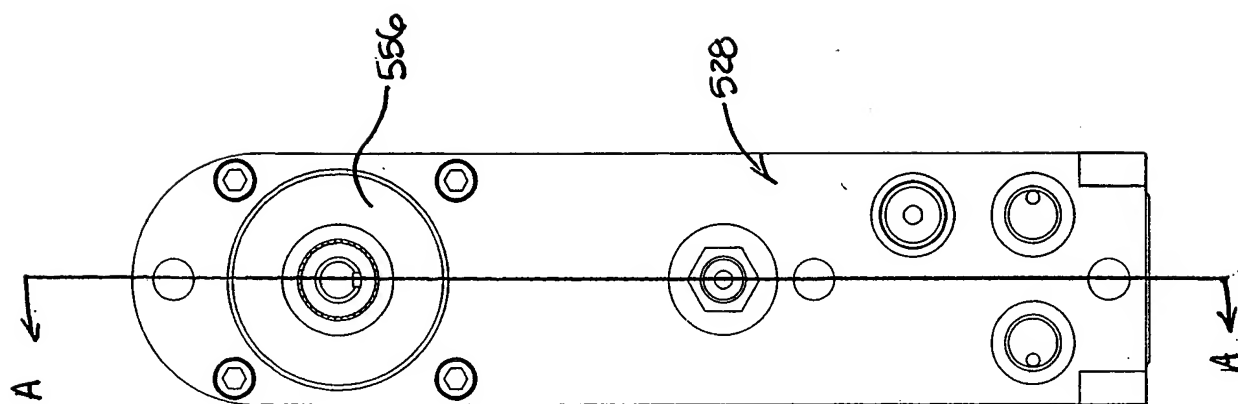
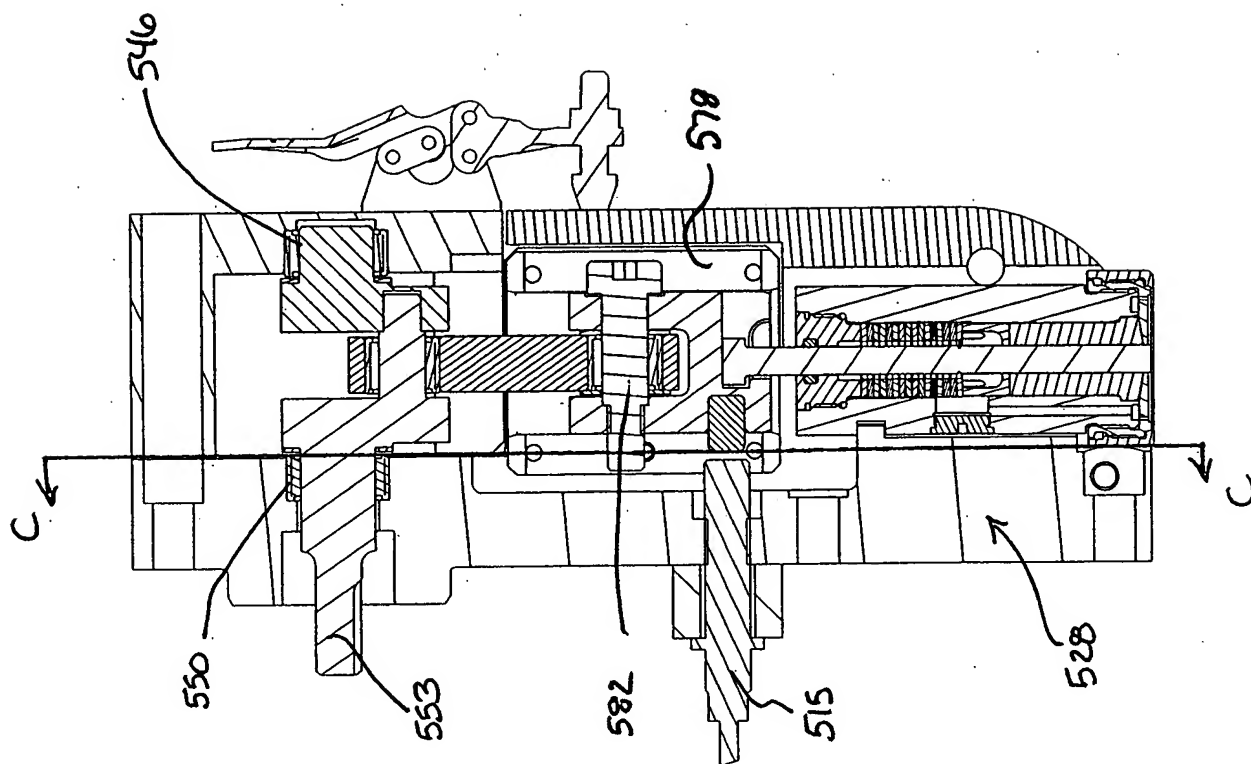


FIG. 62



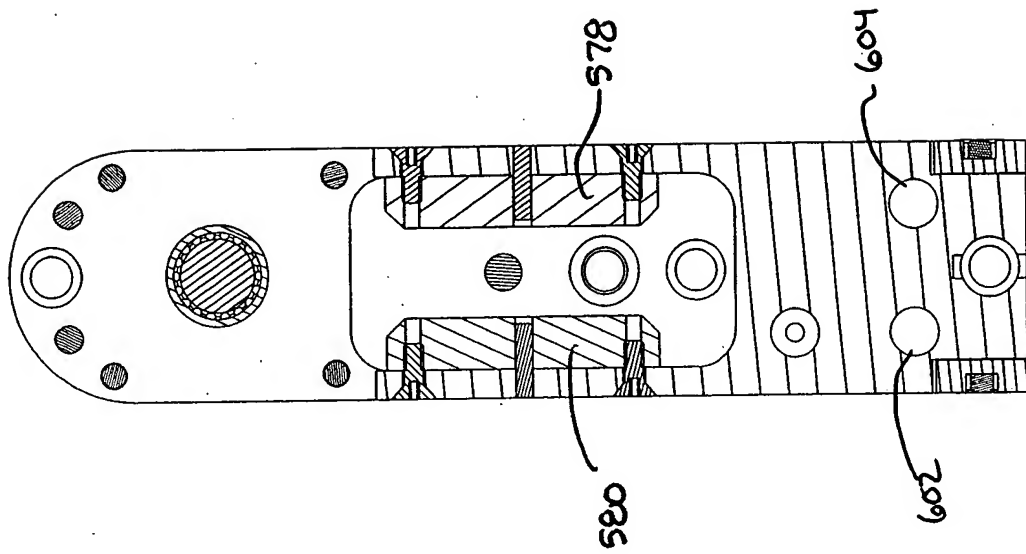


FIG. 63

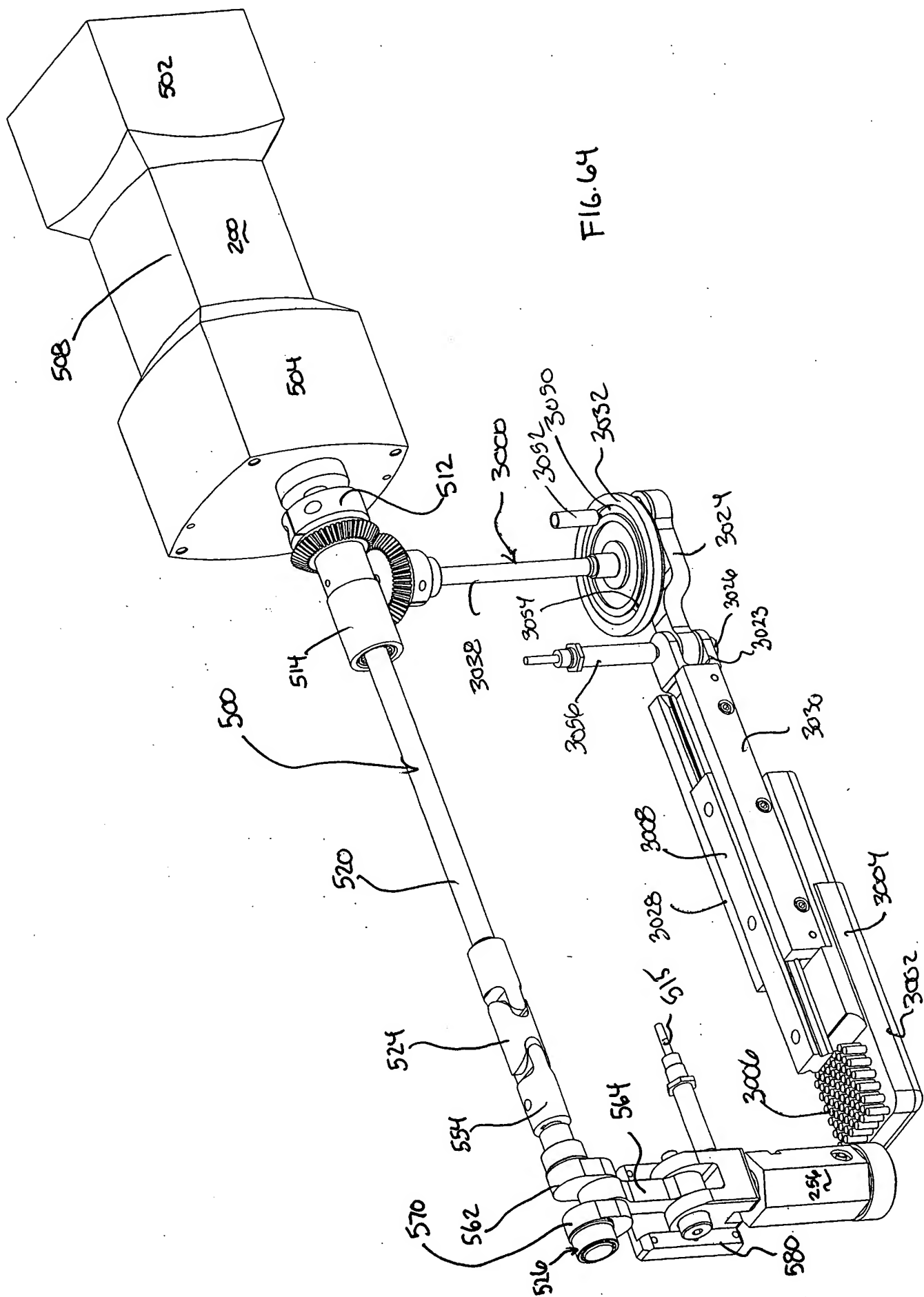
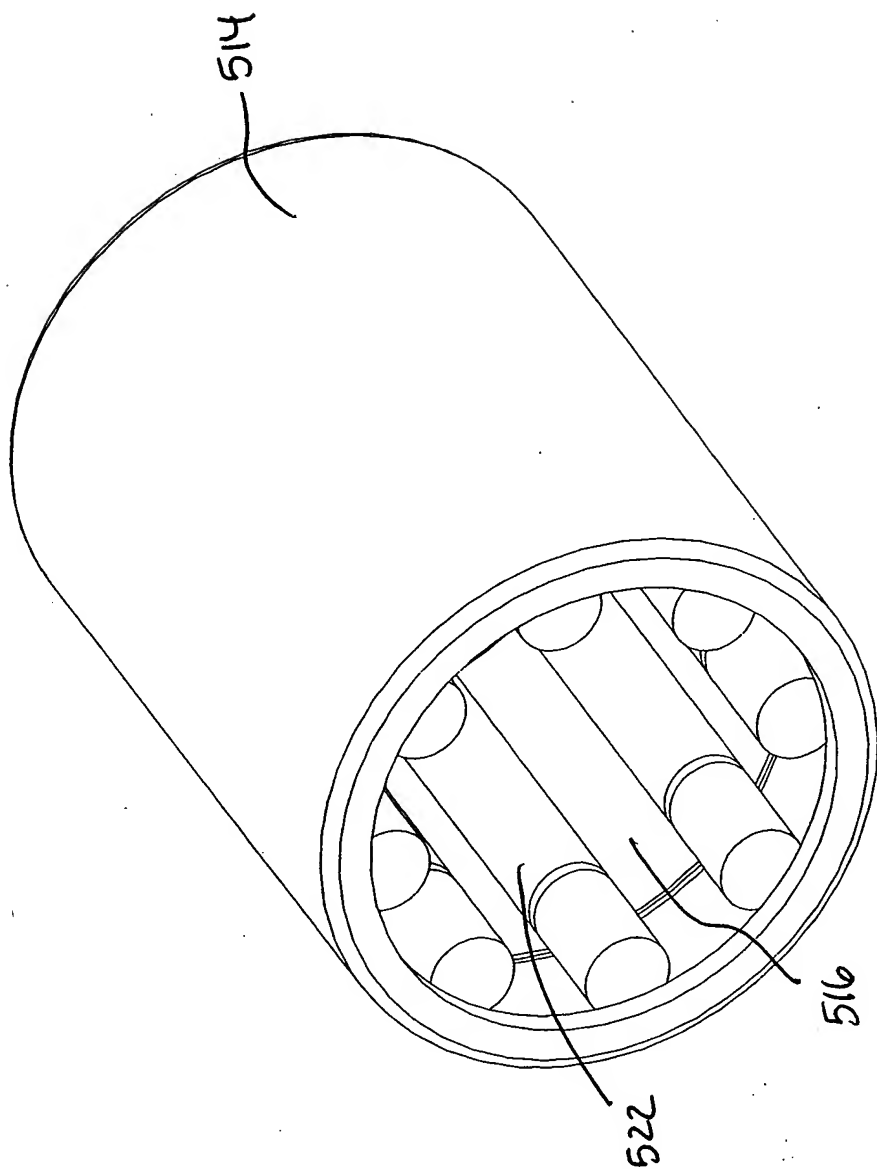


FIG. 64

FIG. 65



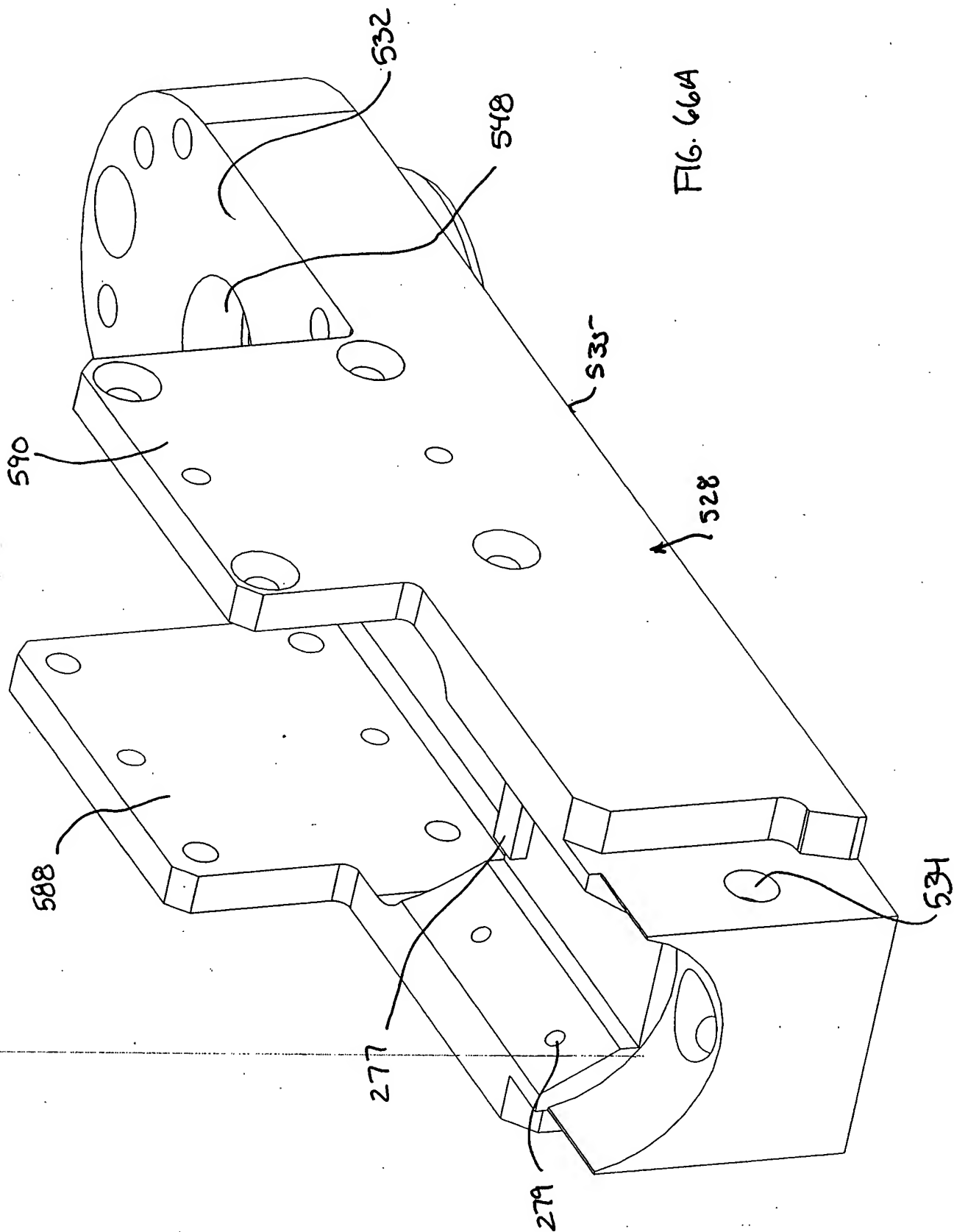
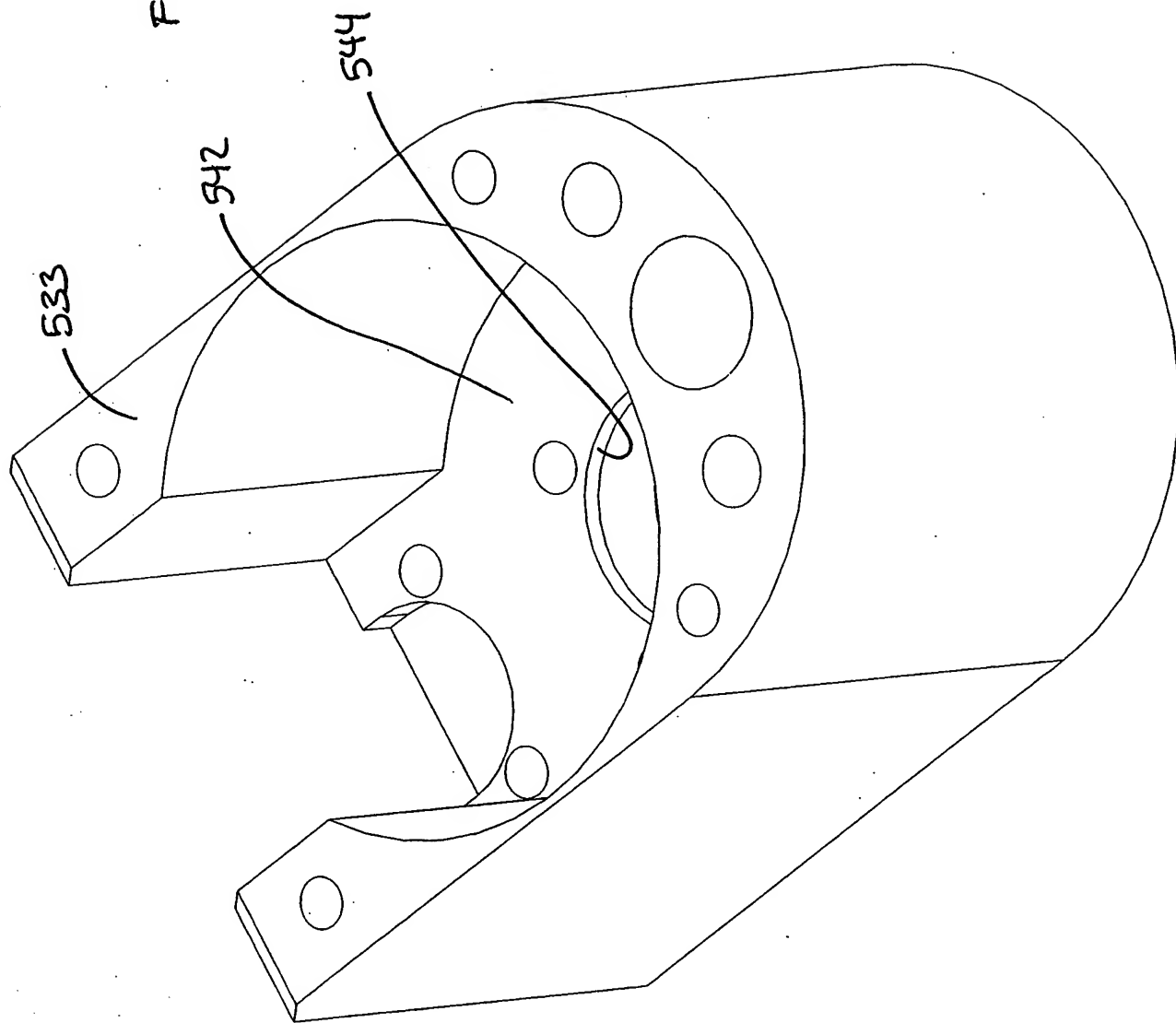


FIG. 66A

FIG. 66B



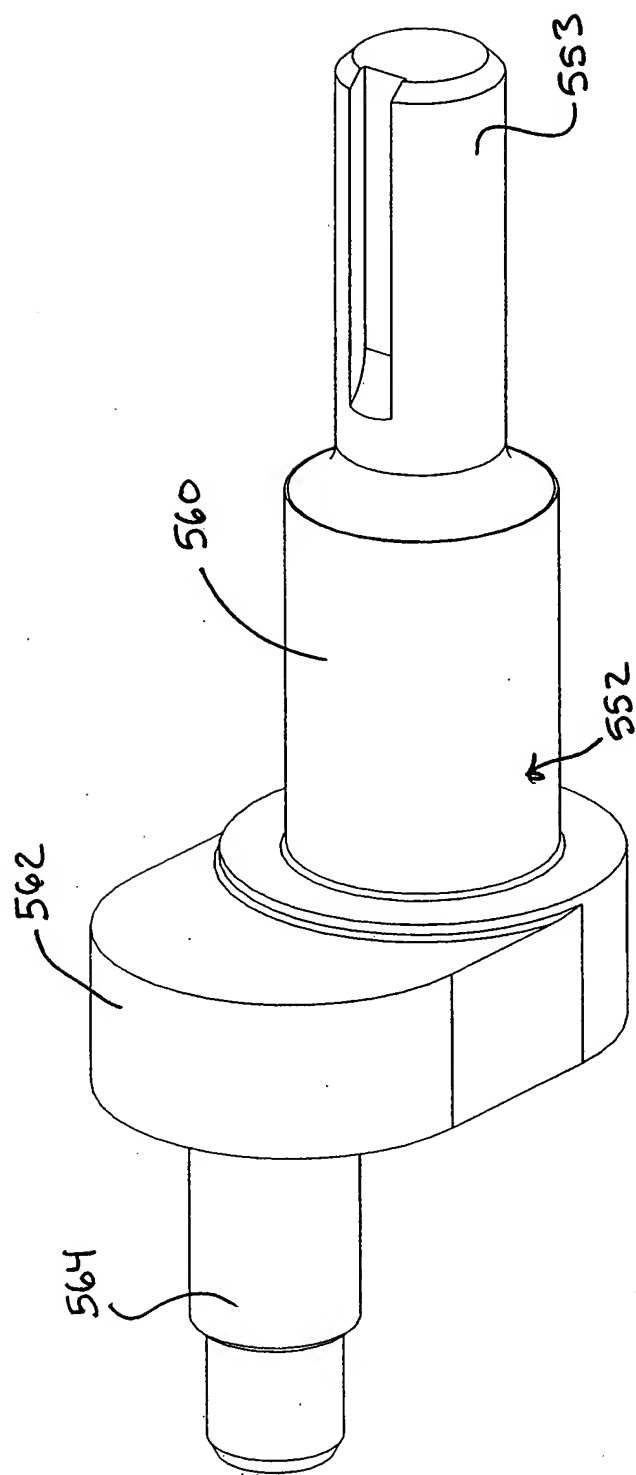


FIG. 67

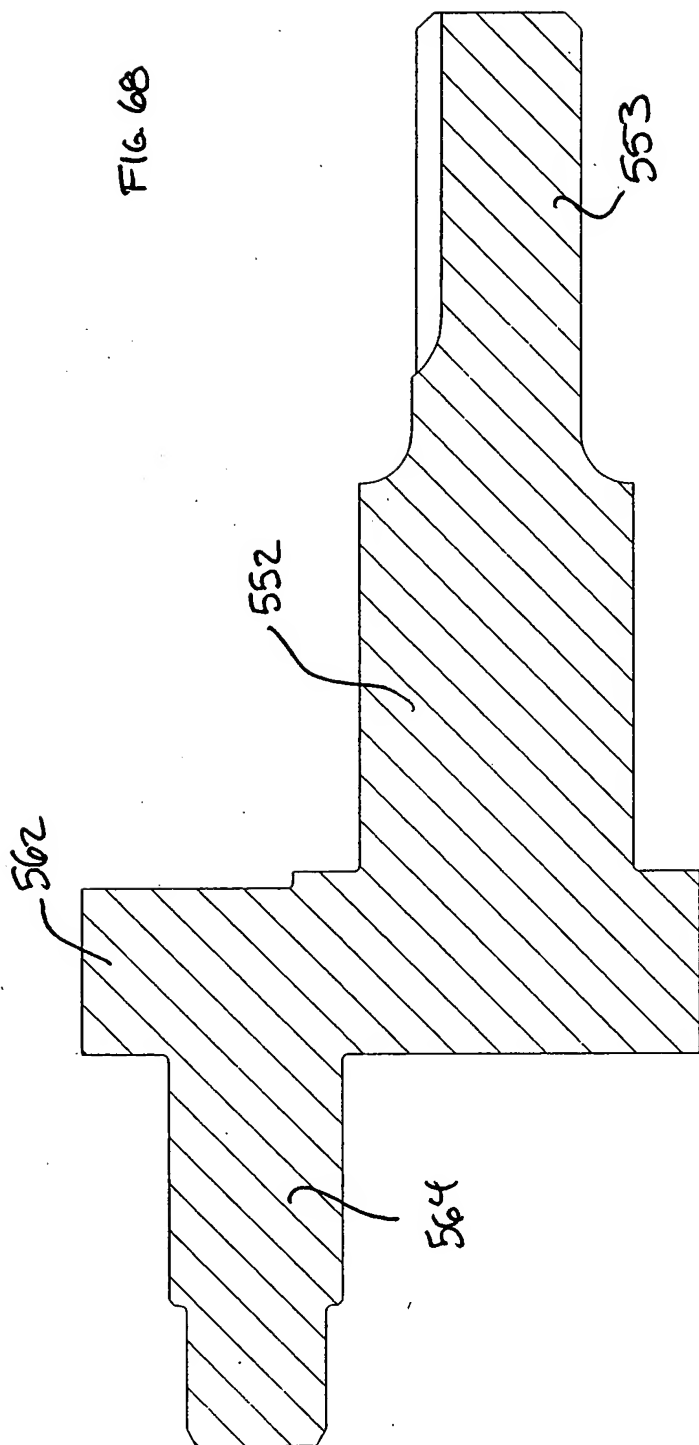


FIG. 68

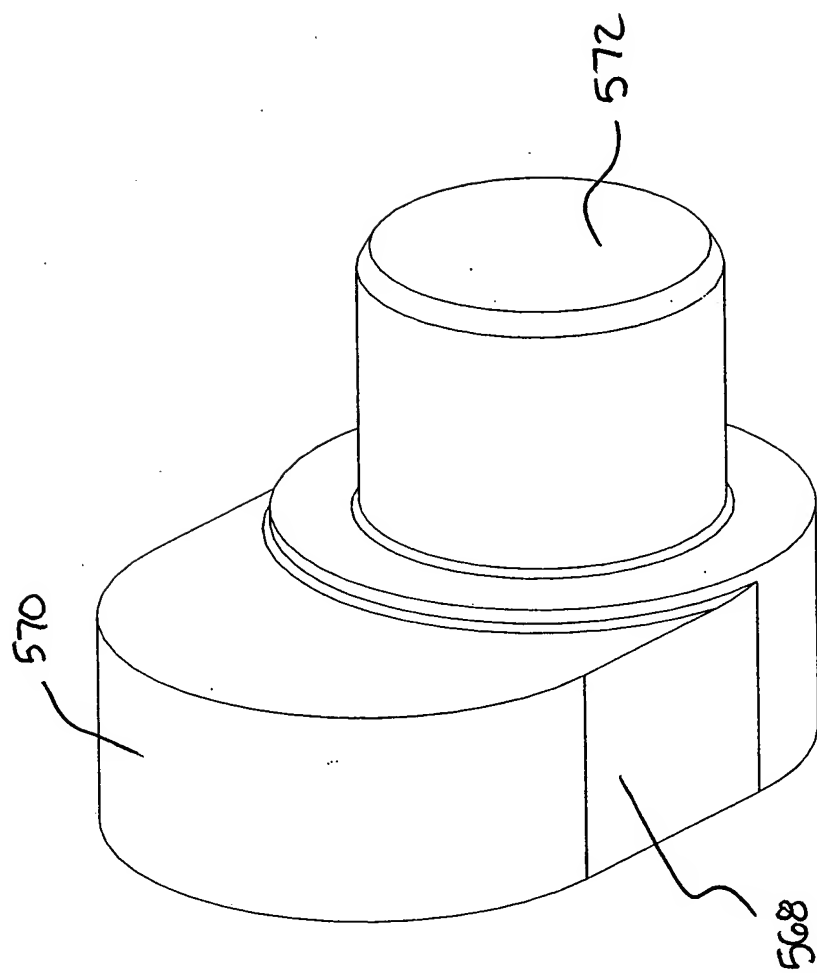


FIG. 69

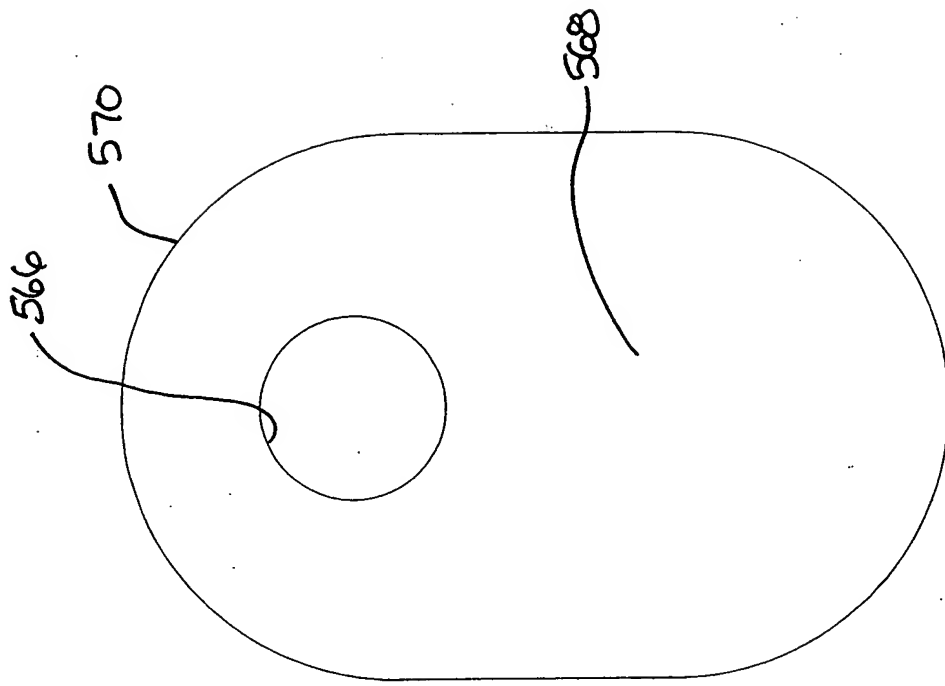


FIG. 20

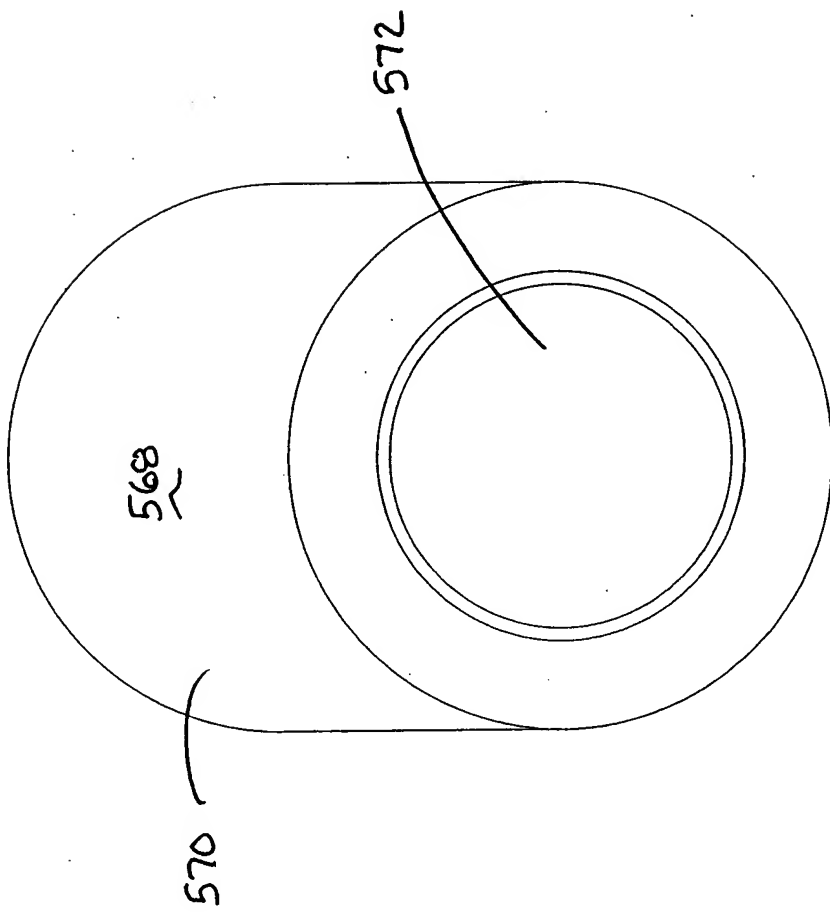


FIG. 71

FIG. 72

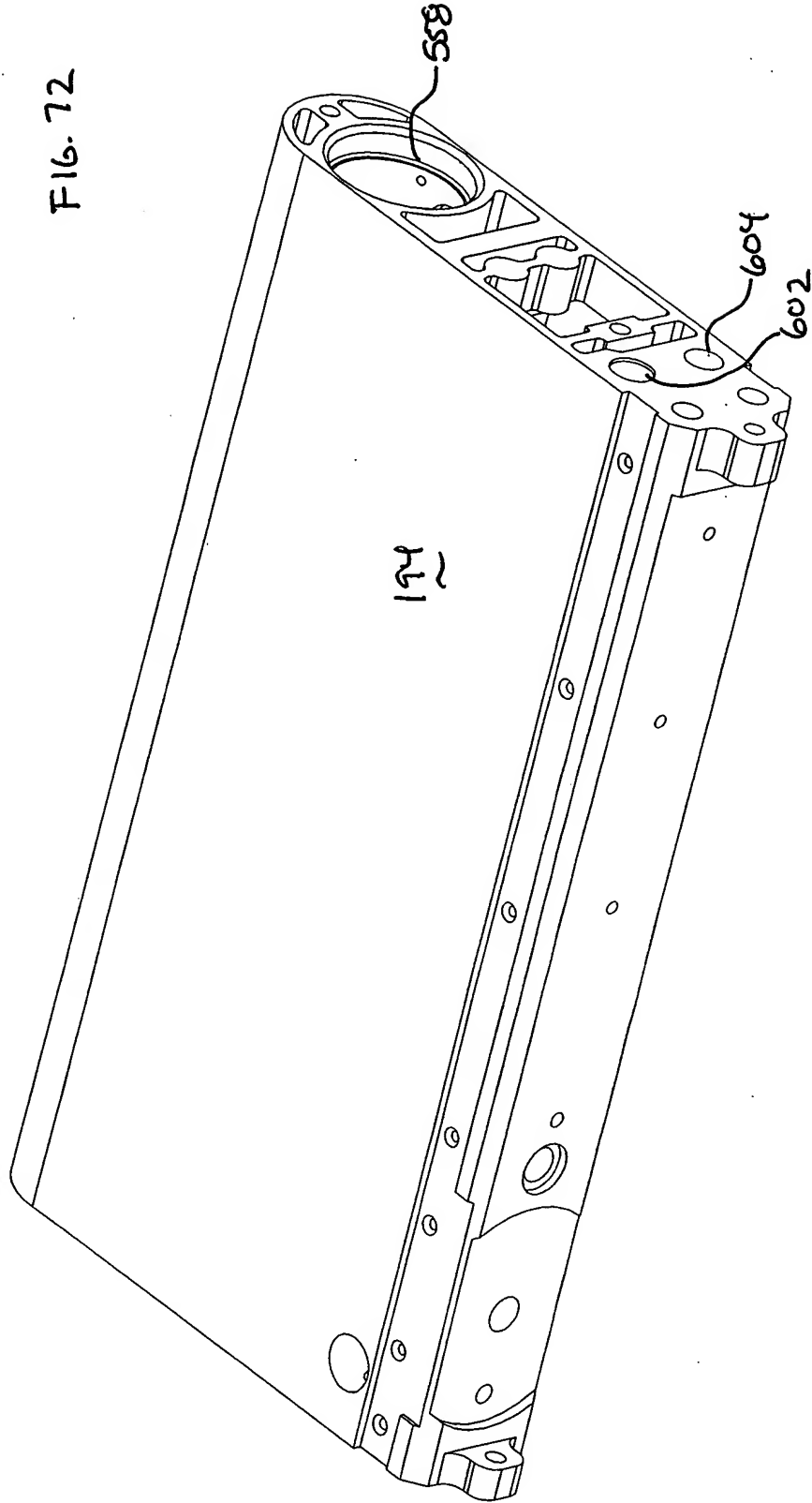
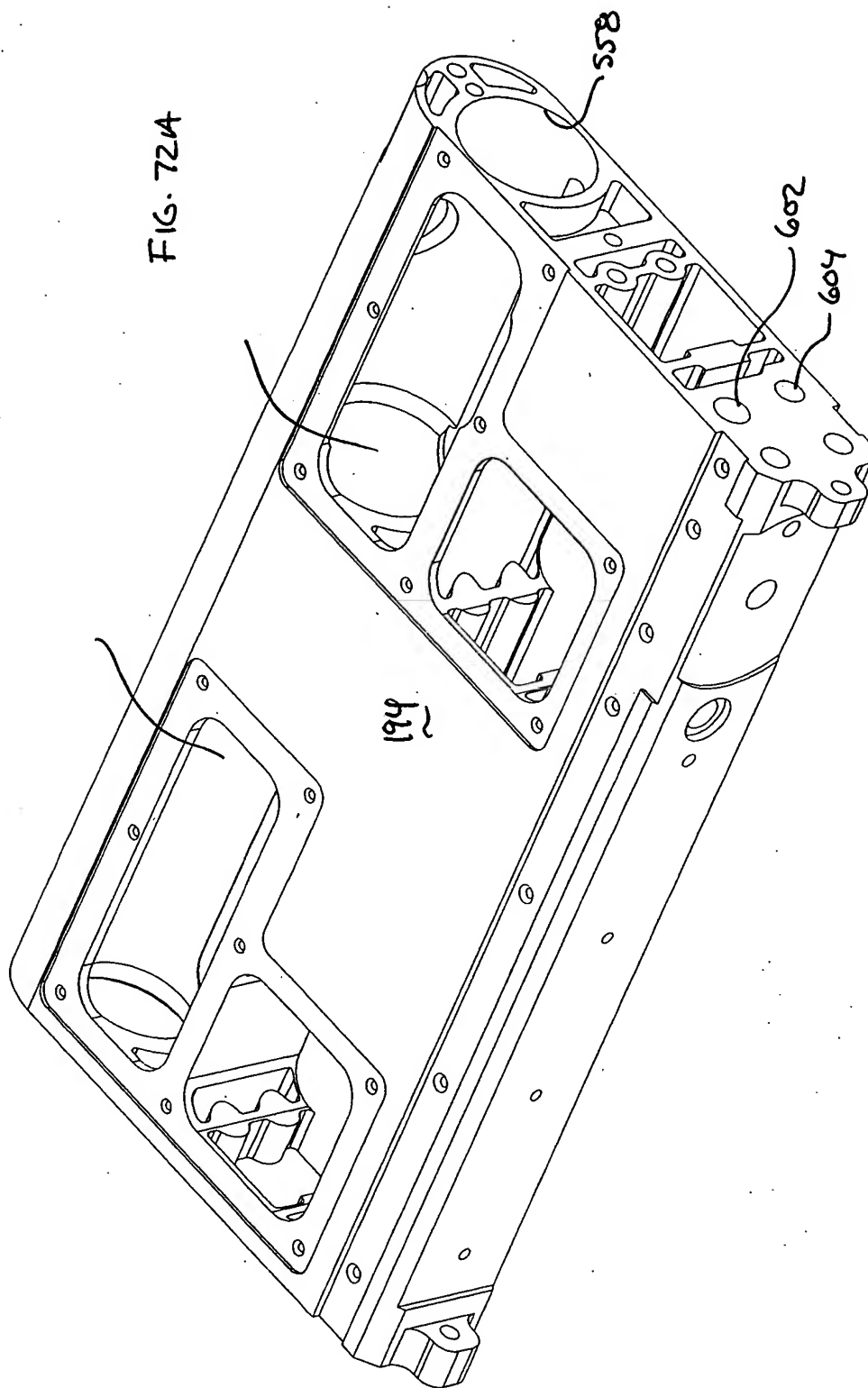


FIG. 72A



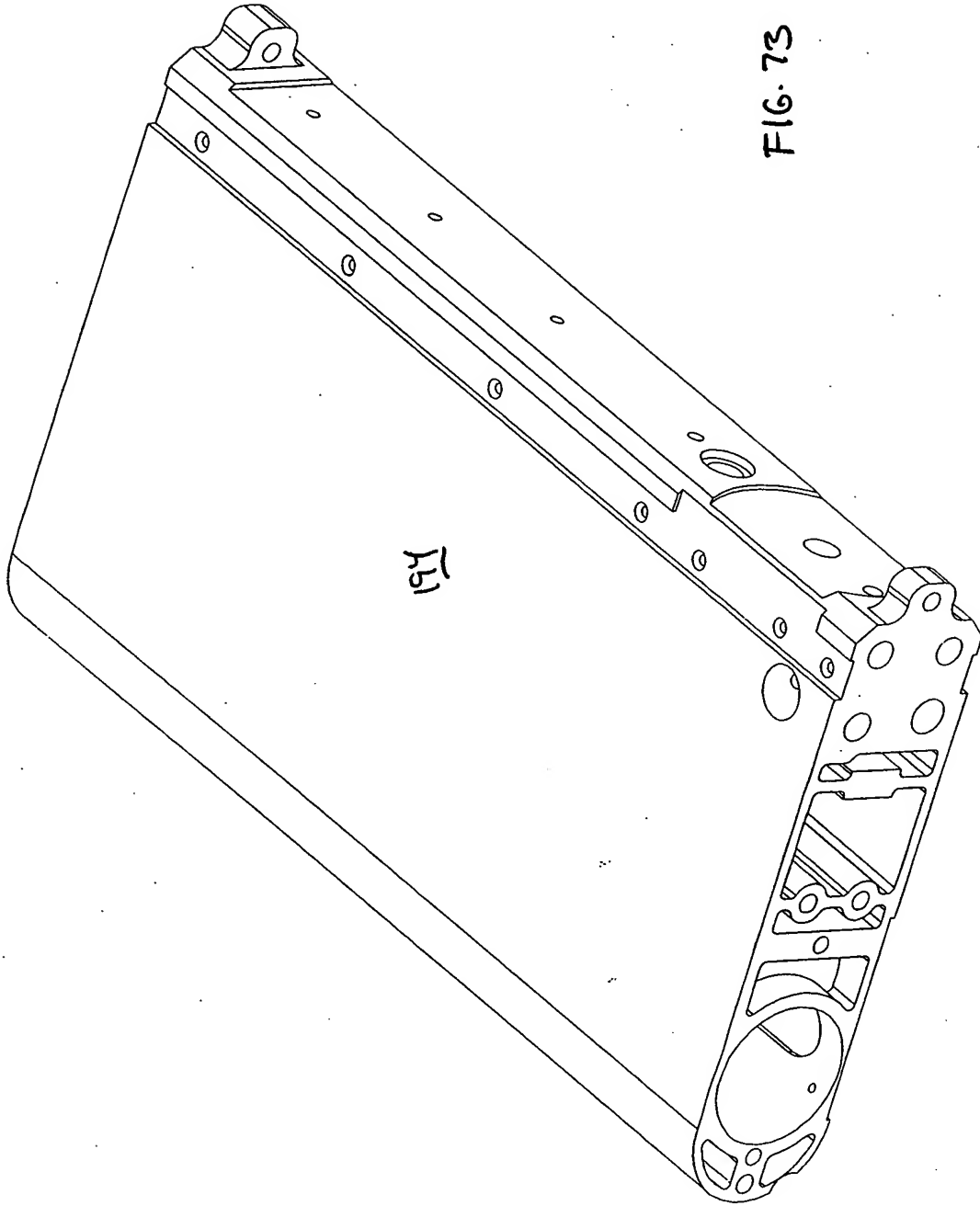


FIG. 73

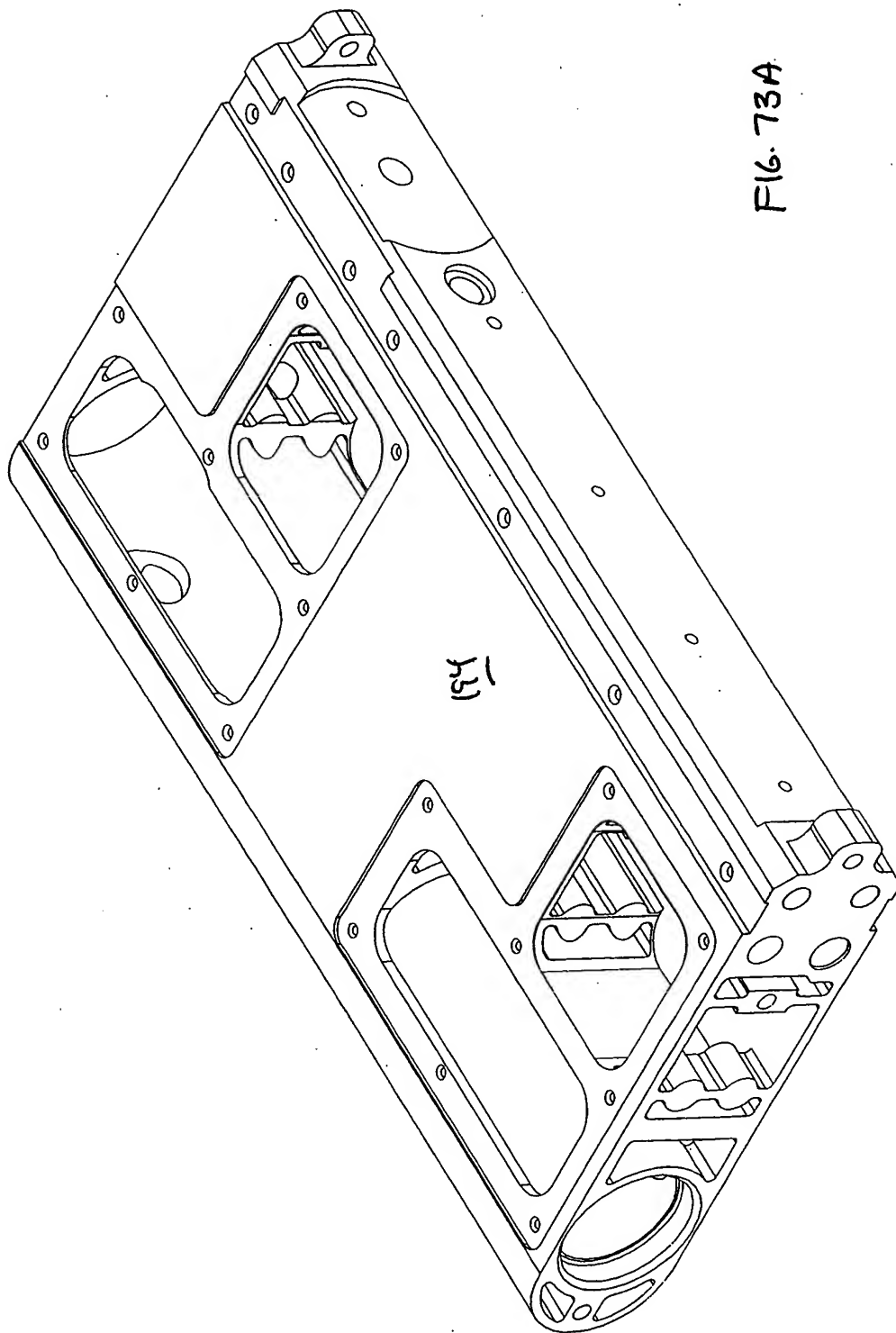


FIG. 73A

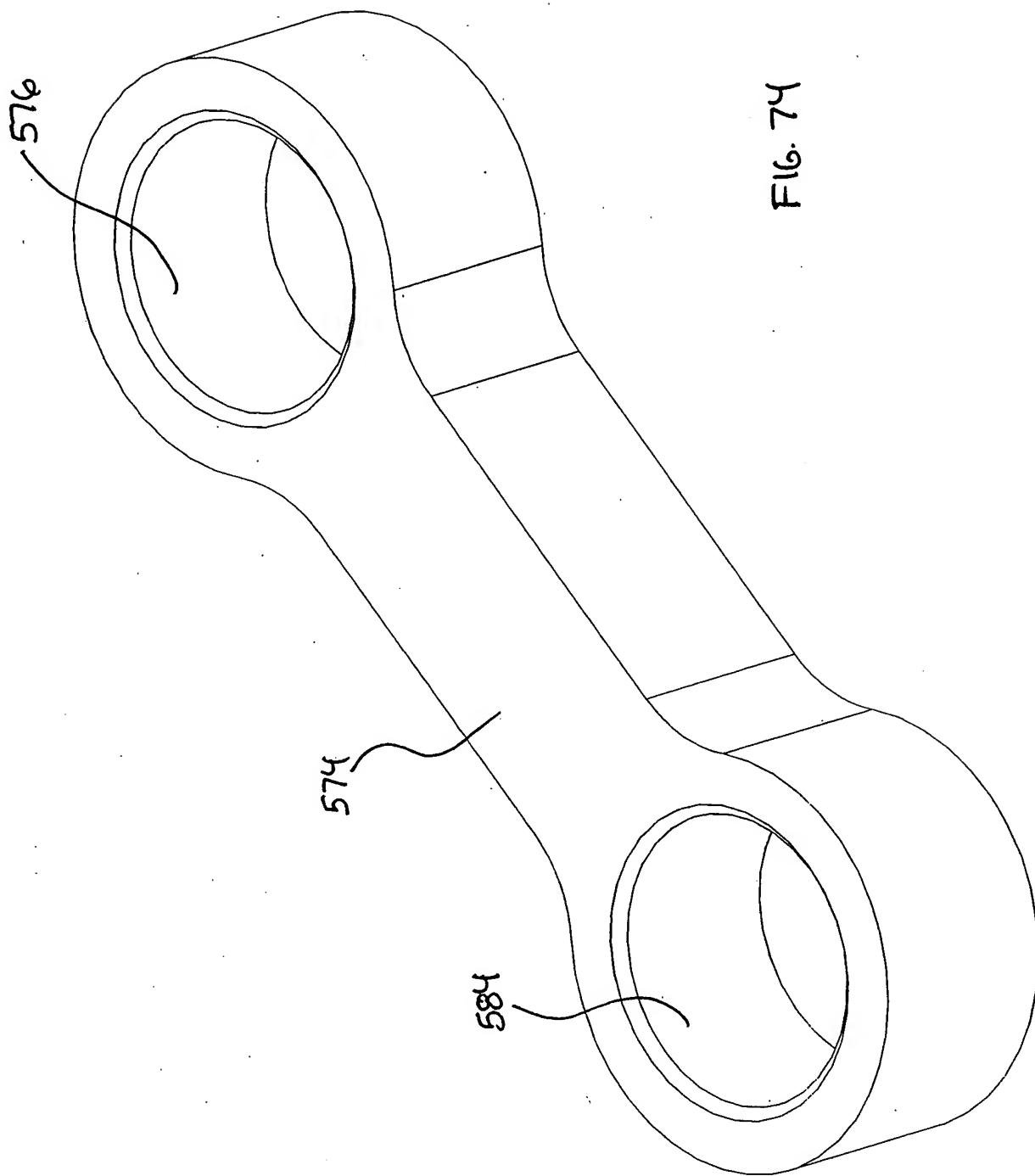
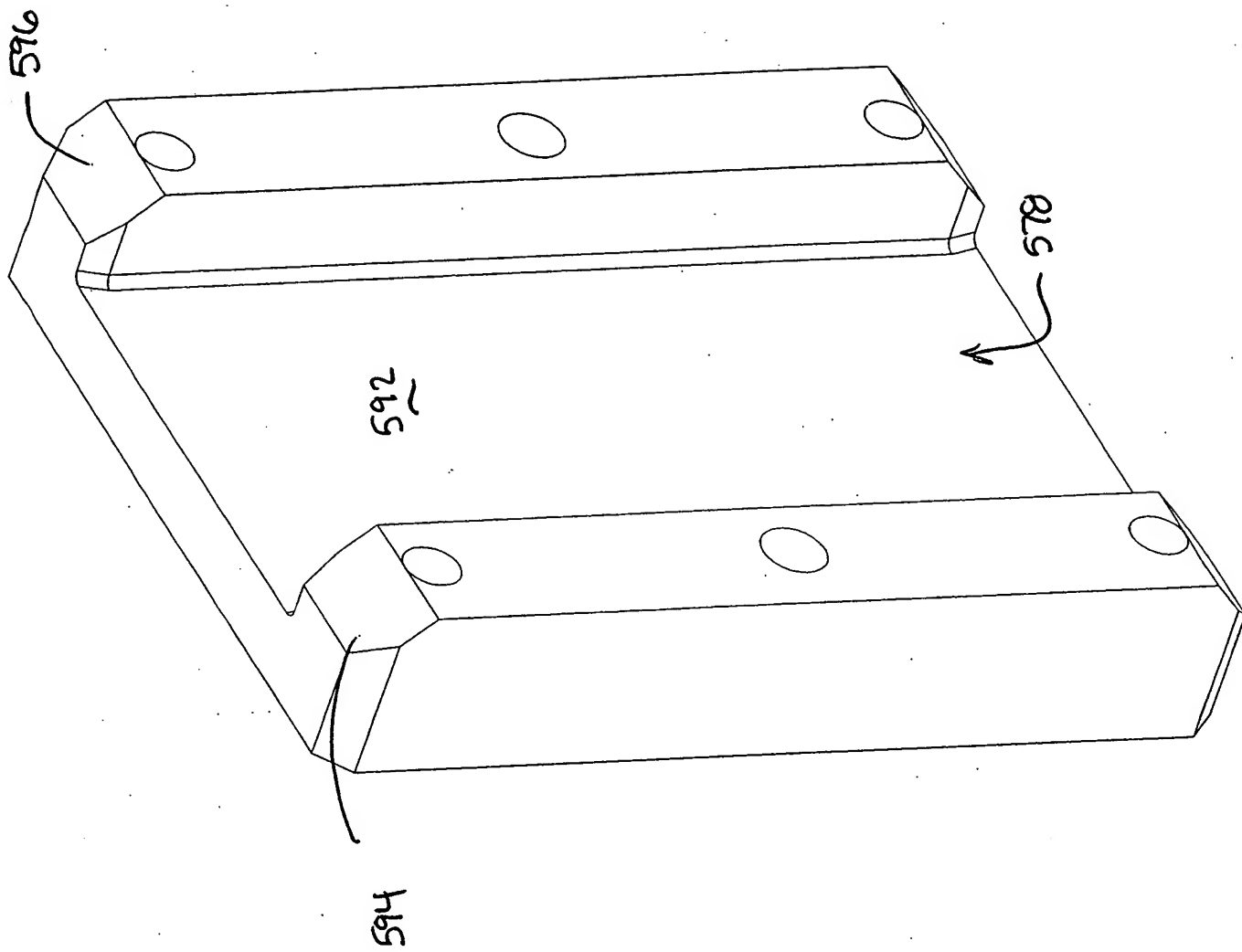


FIG. 74

FIG 75



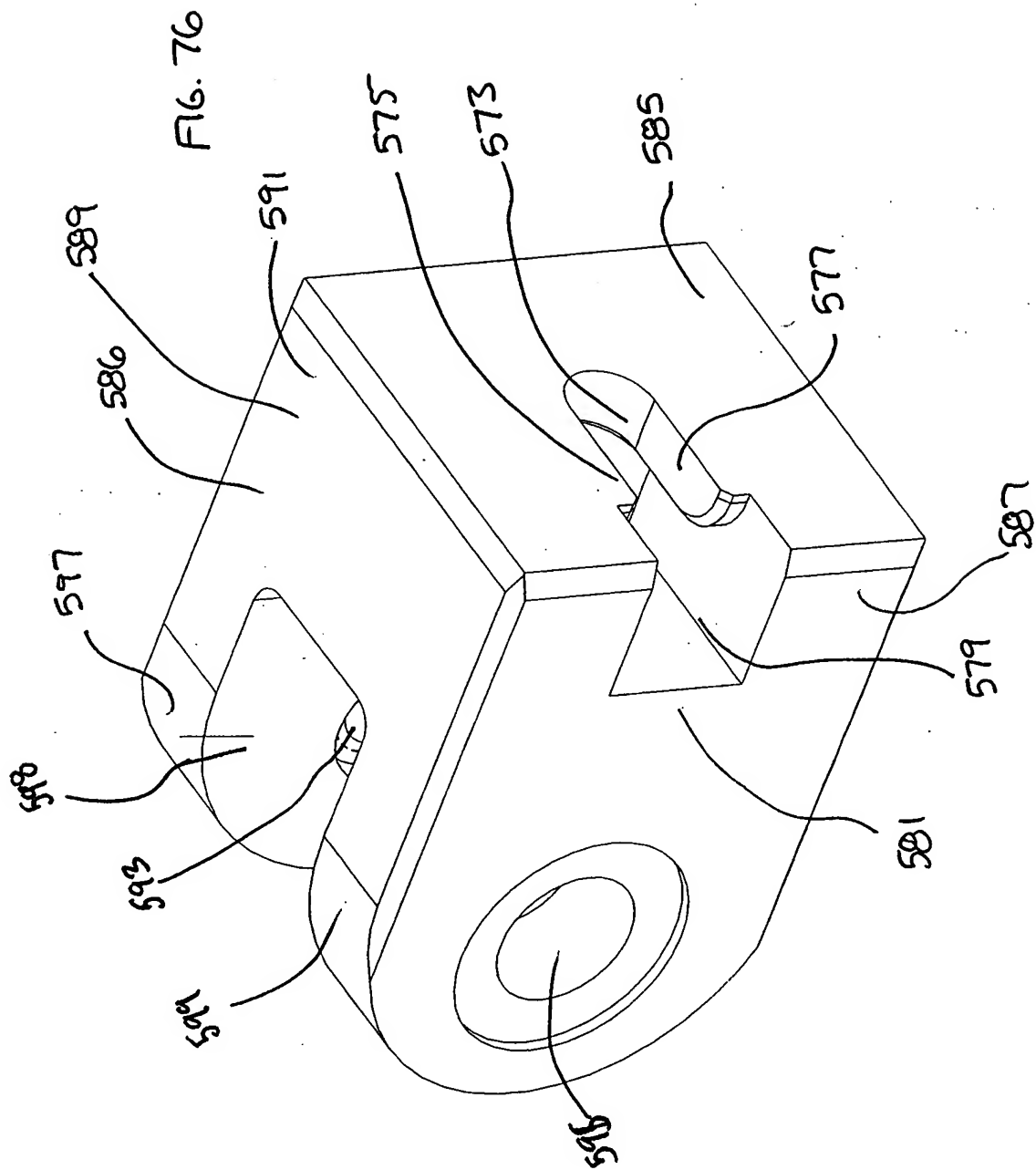


FIG. 77

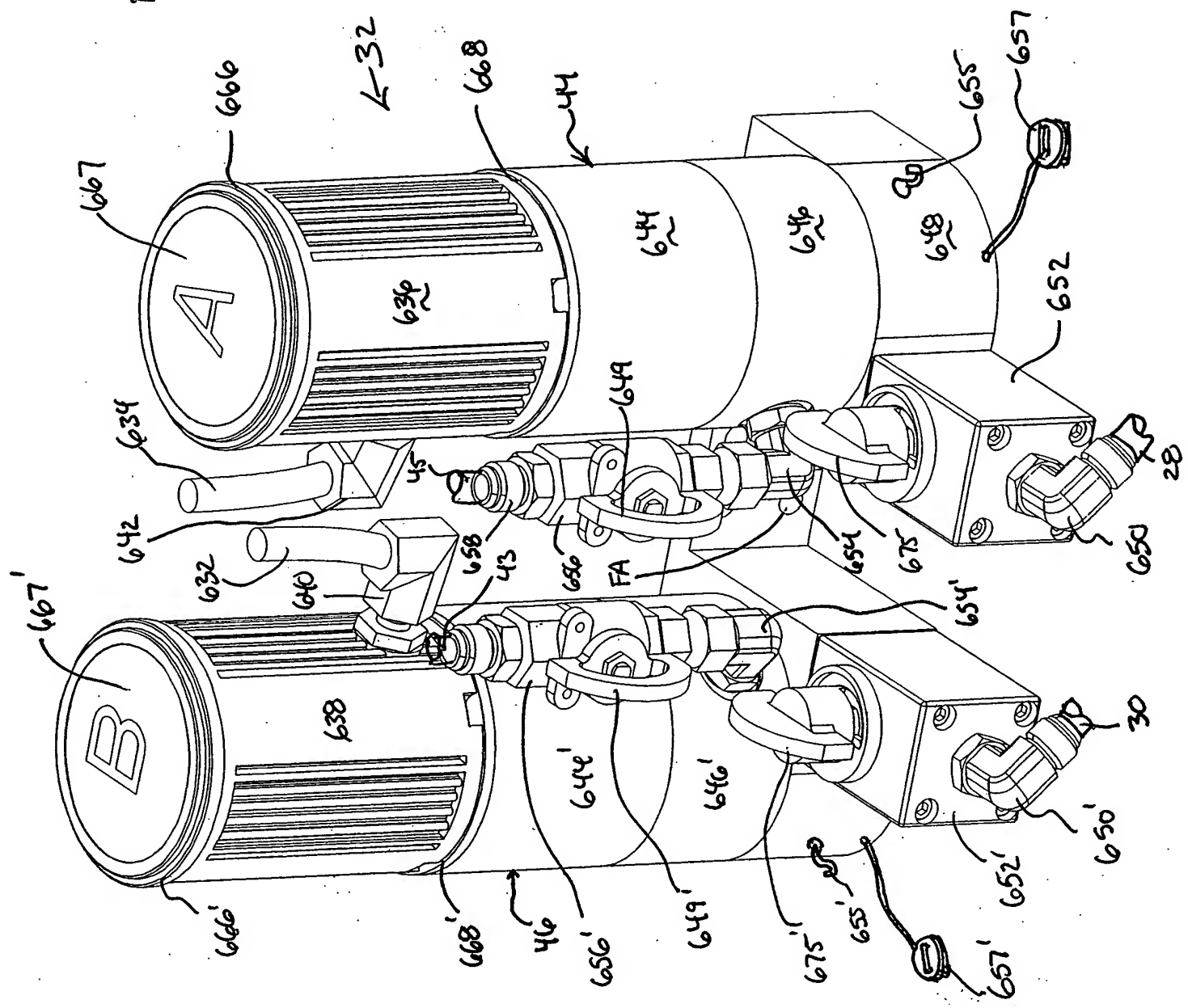


FIG. 77A

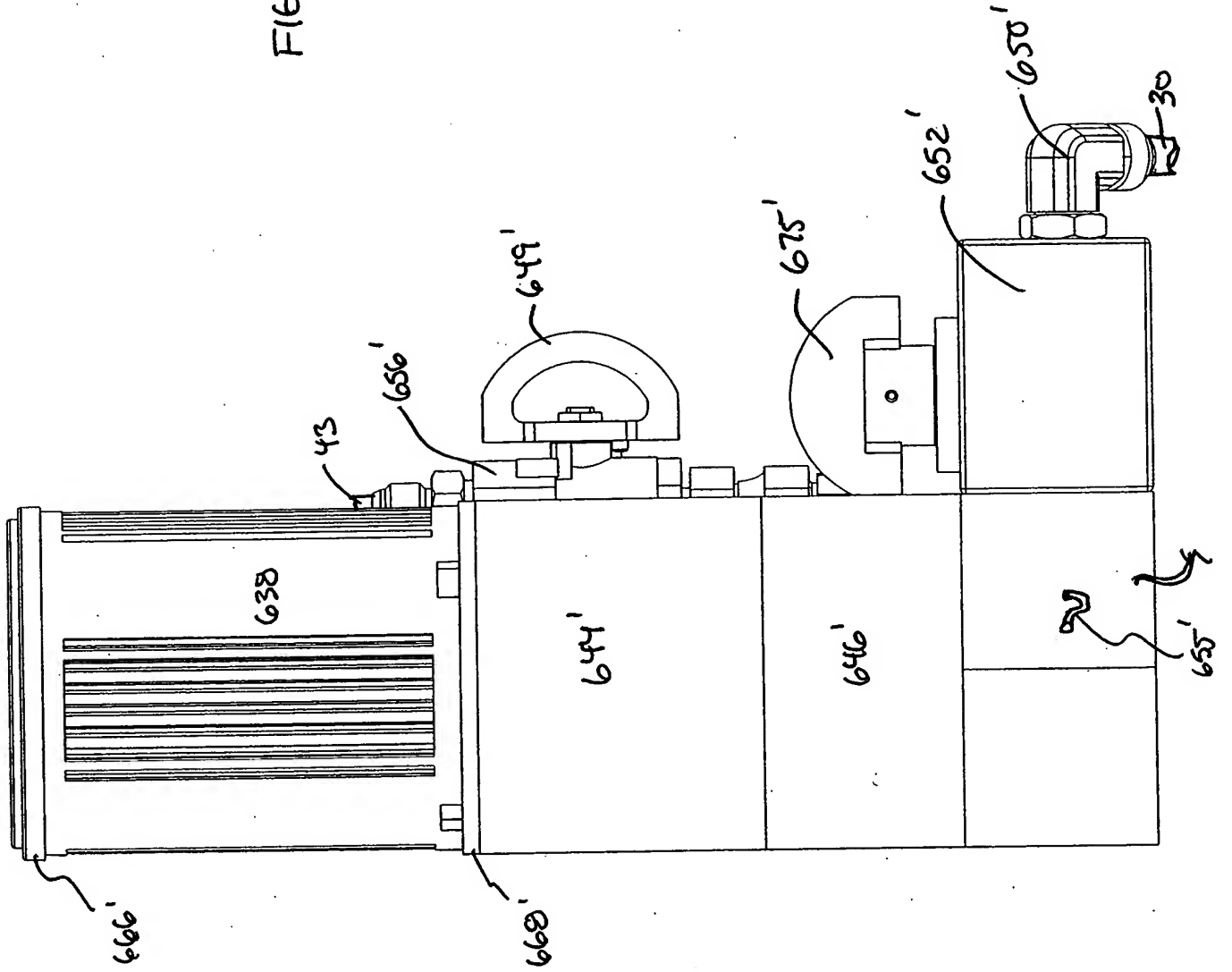


FIG. 79

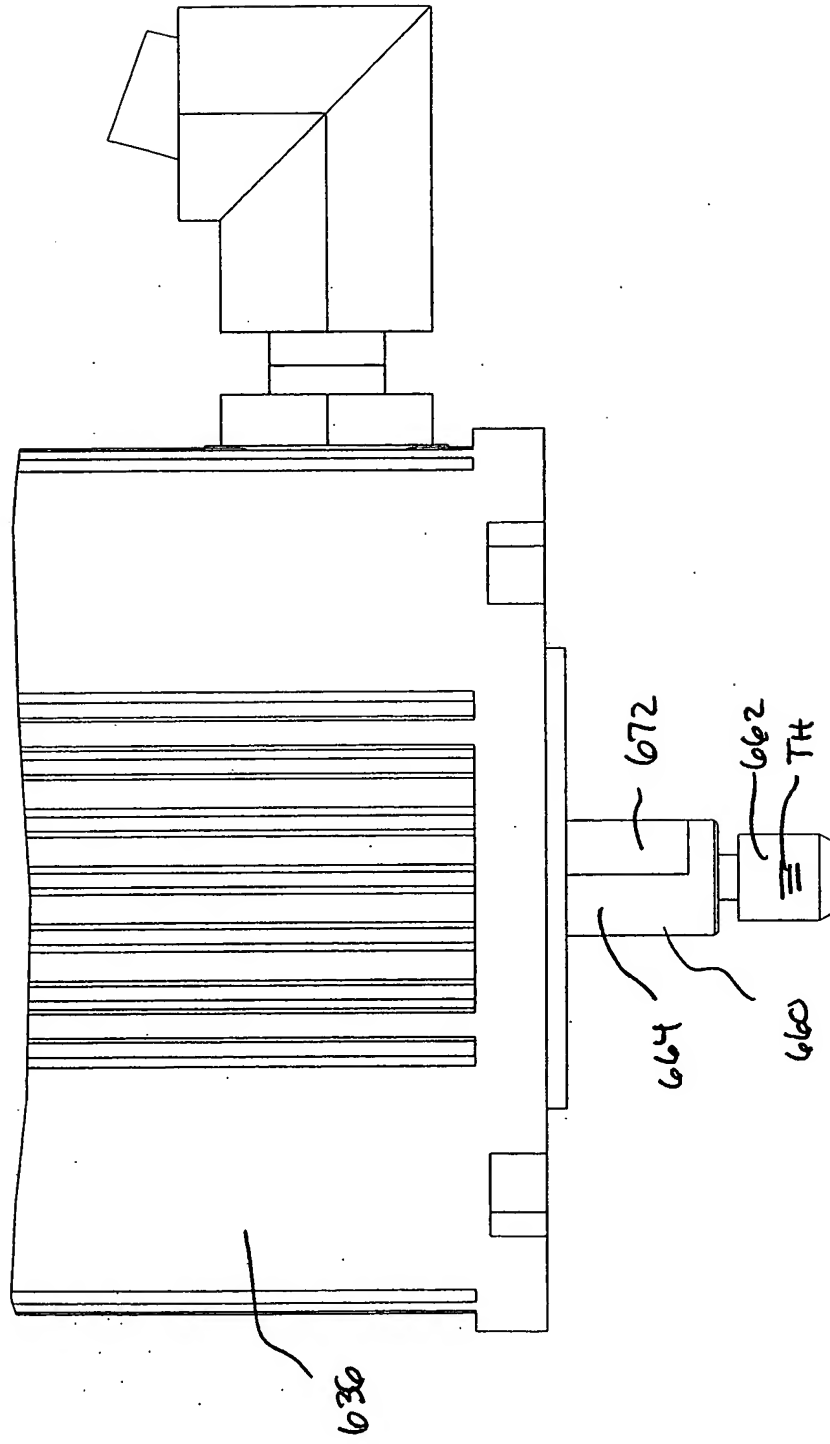
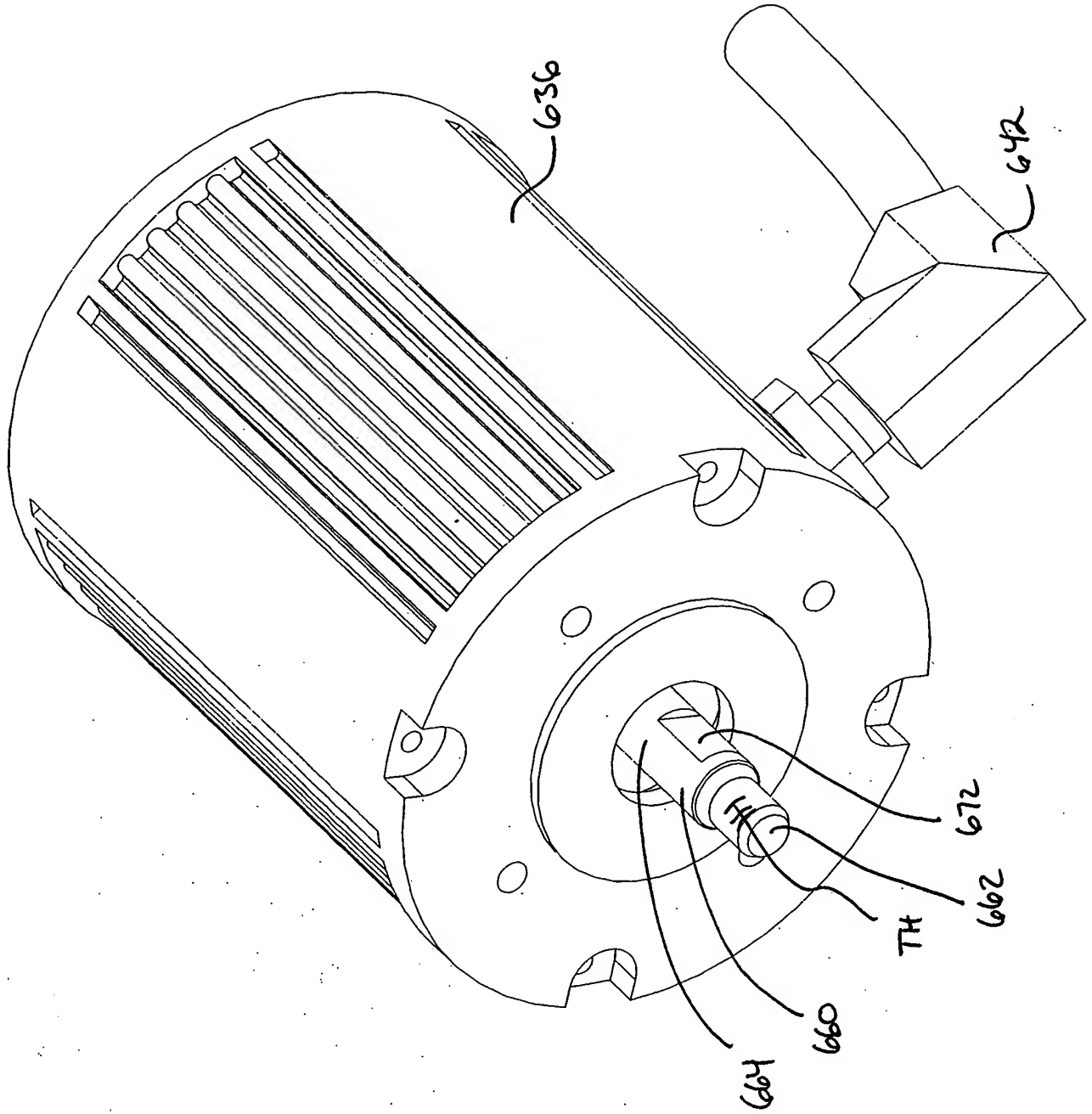
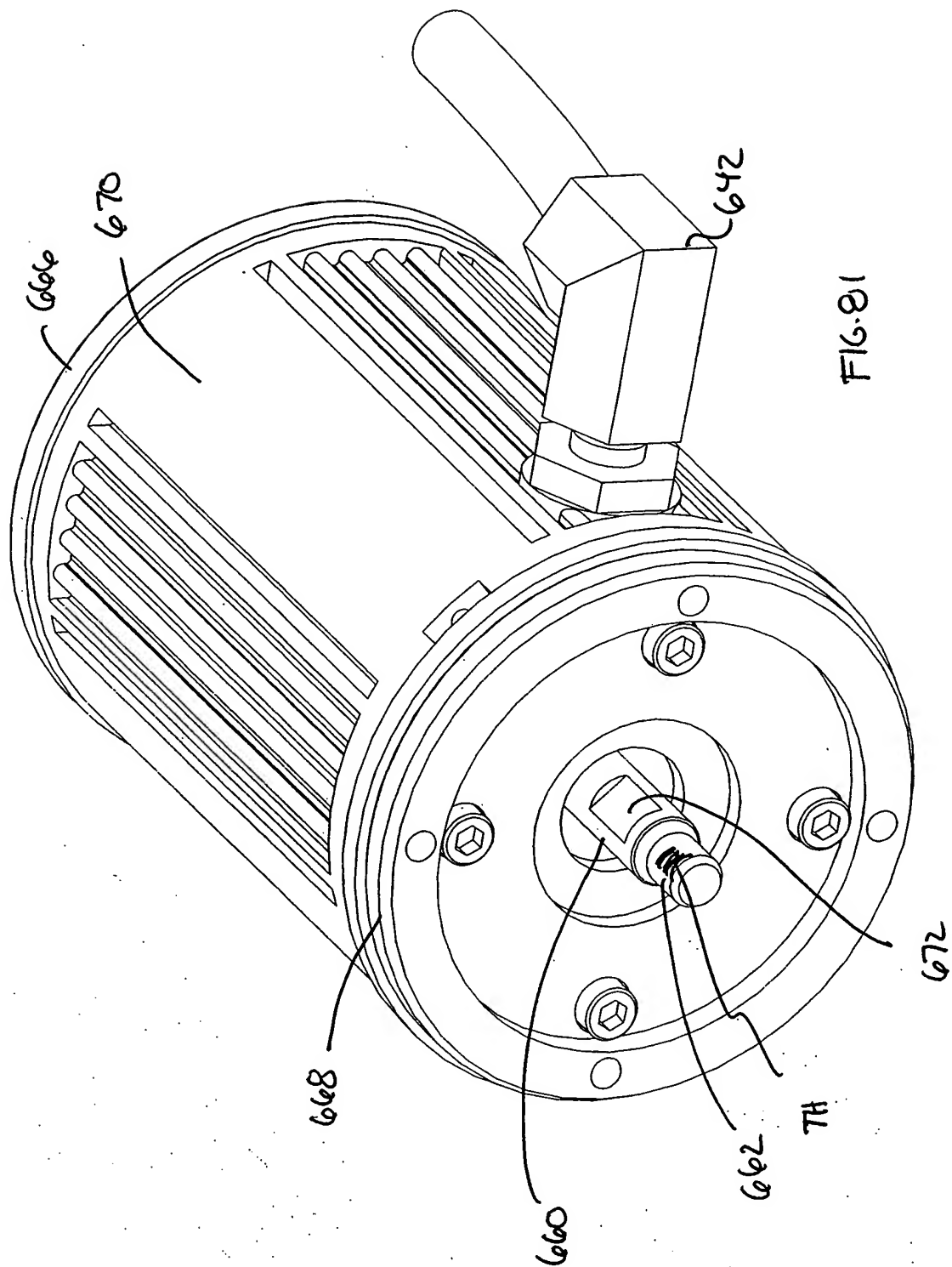


FIG. 80





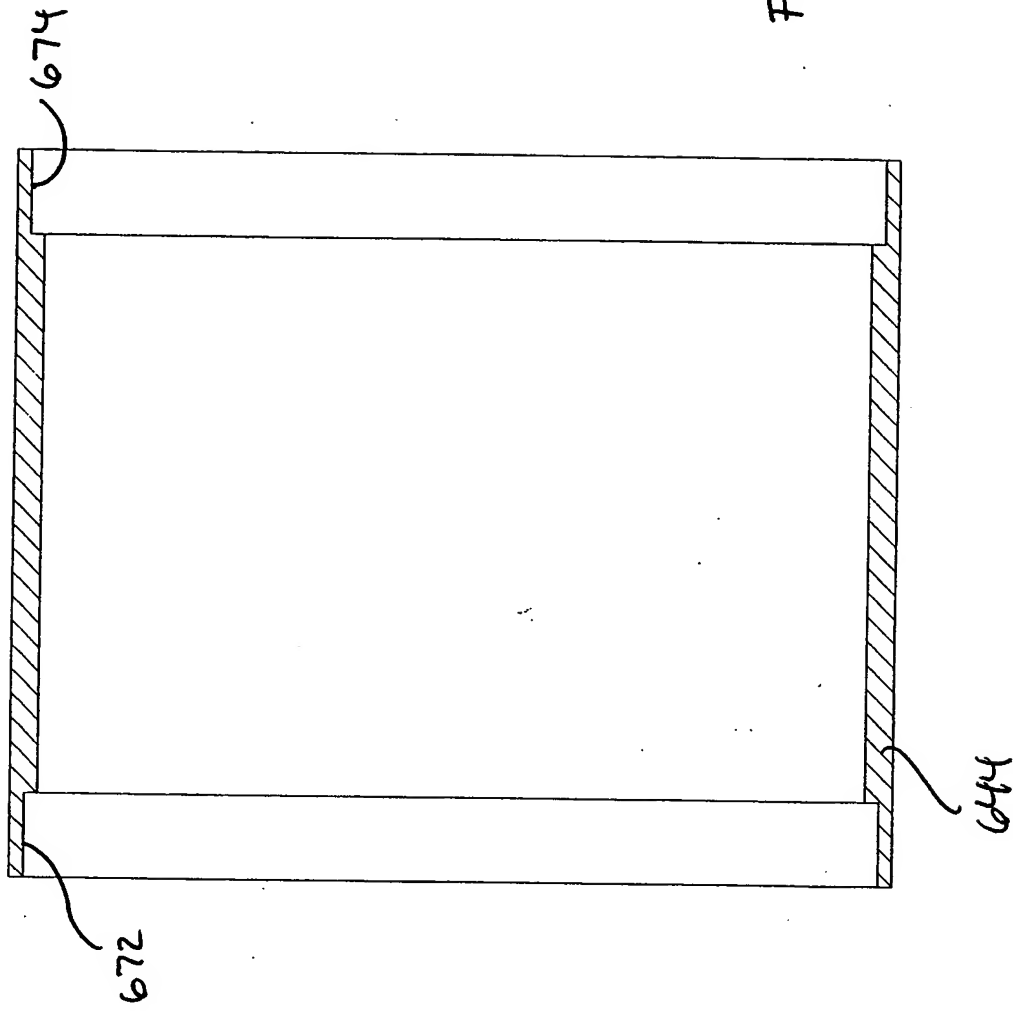
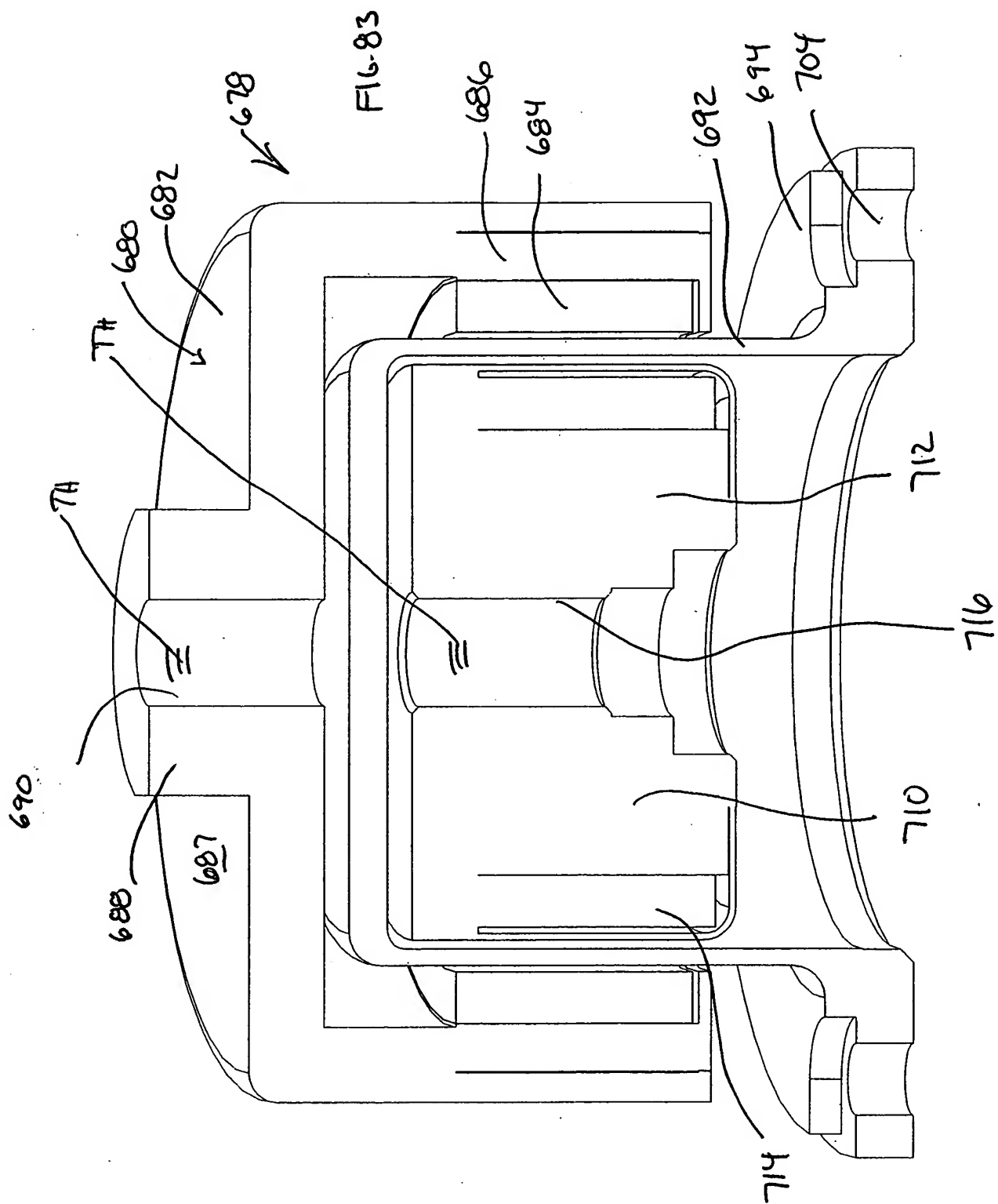


FIG. 82



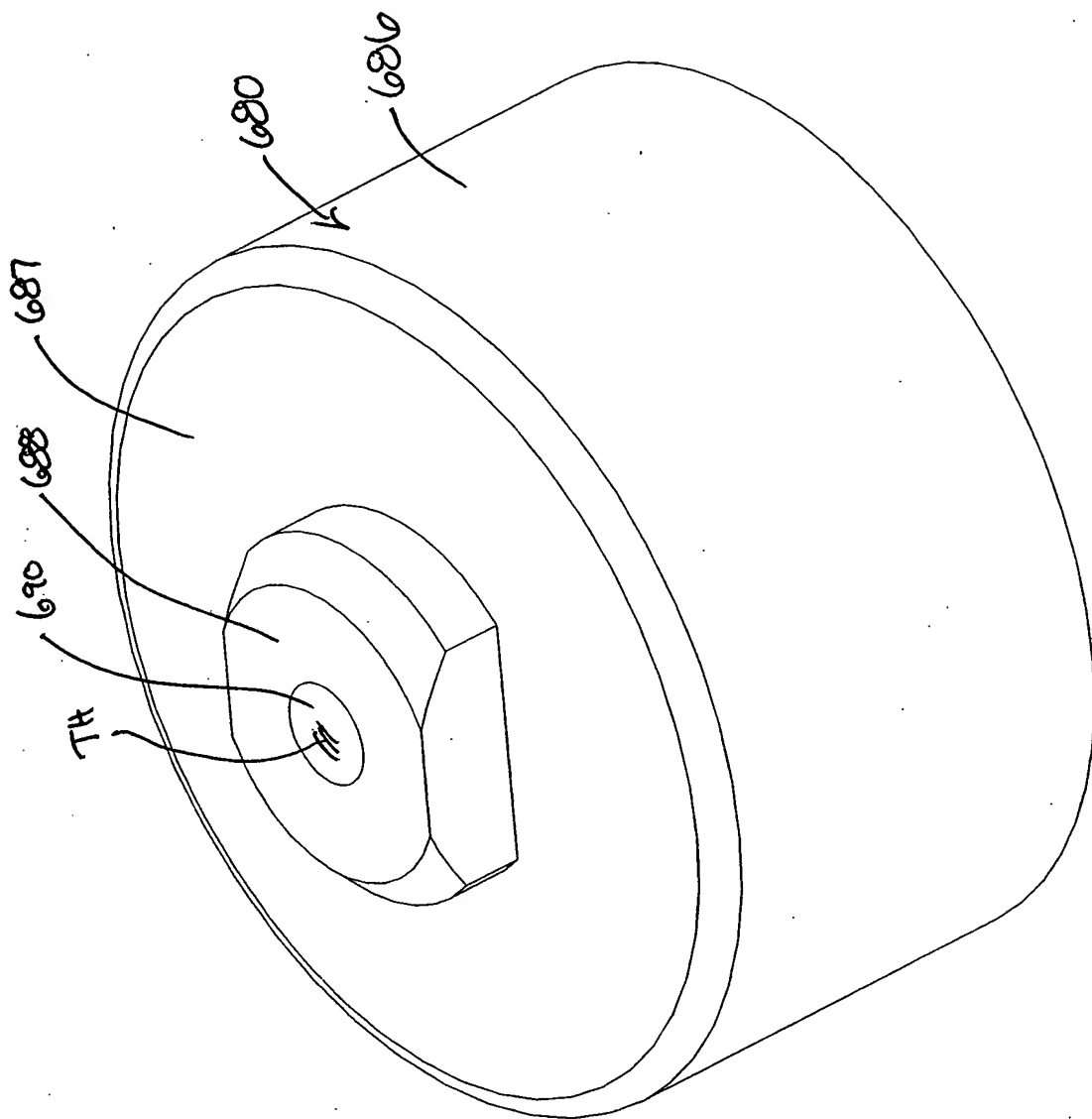


FIG. 84

Fig. 85

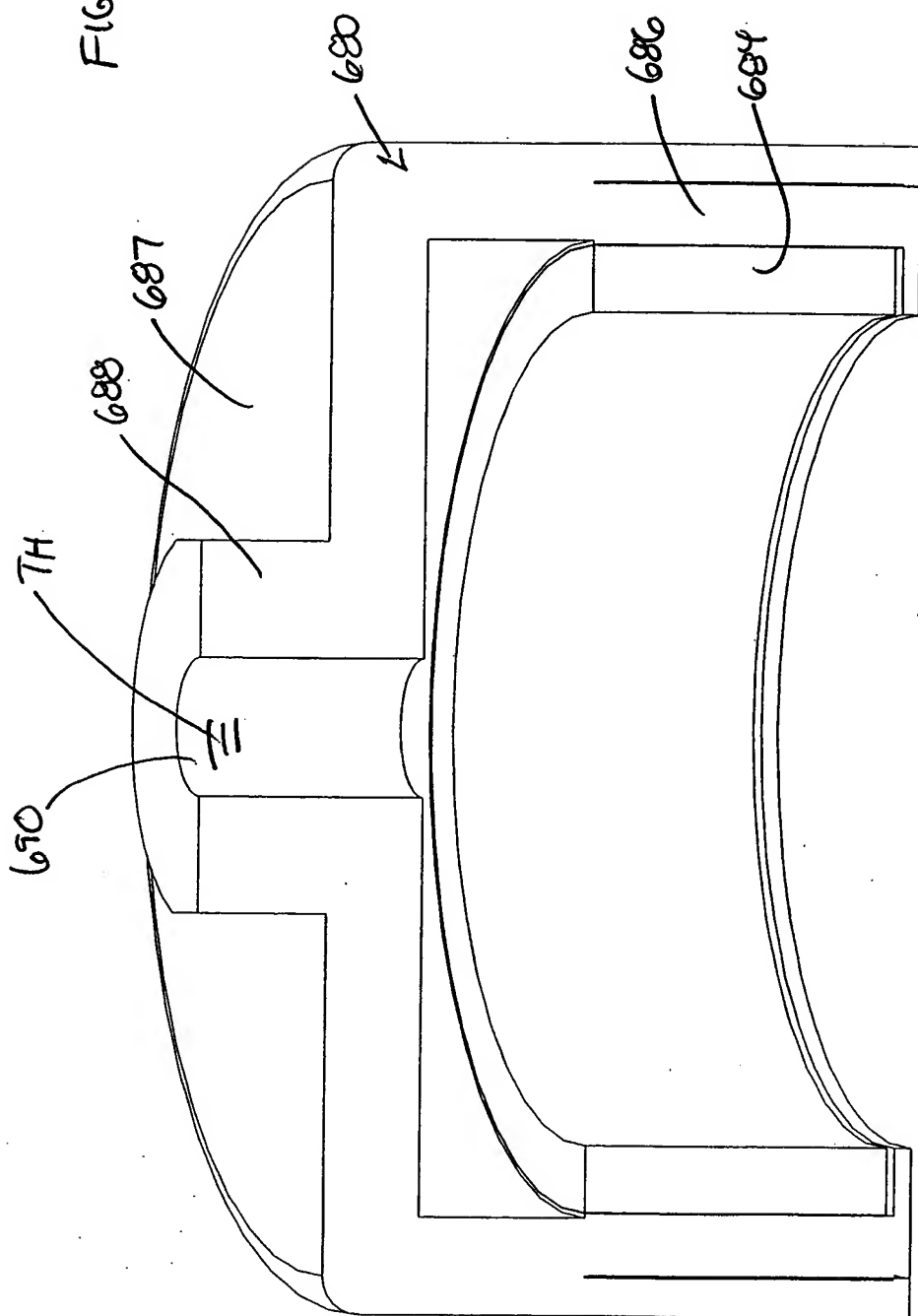


FIG. 86

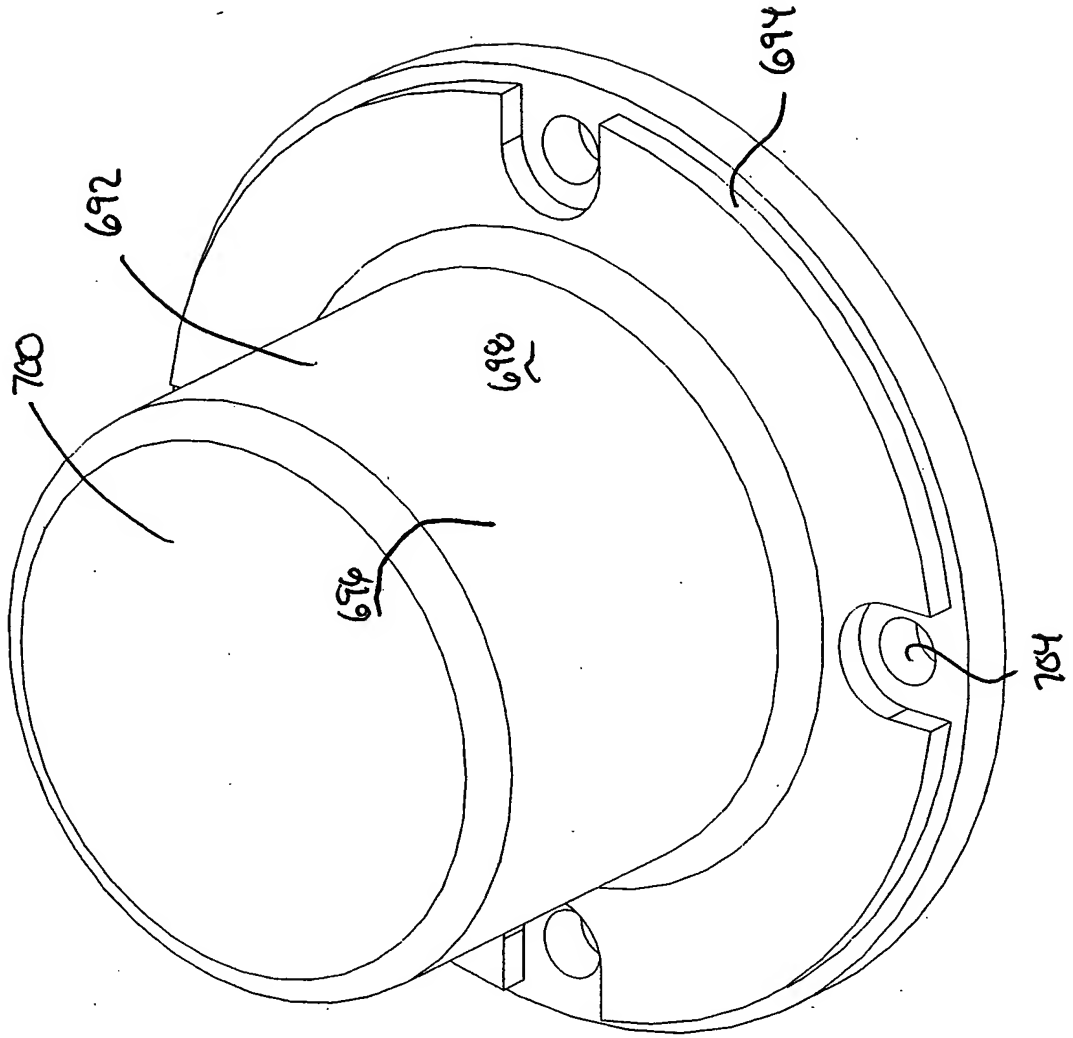
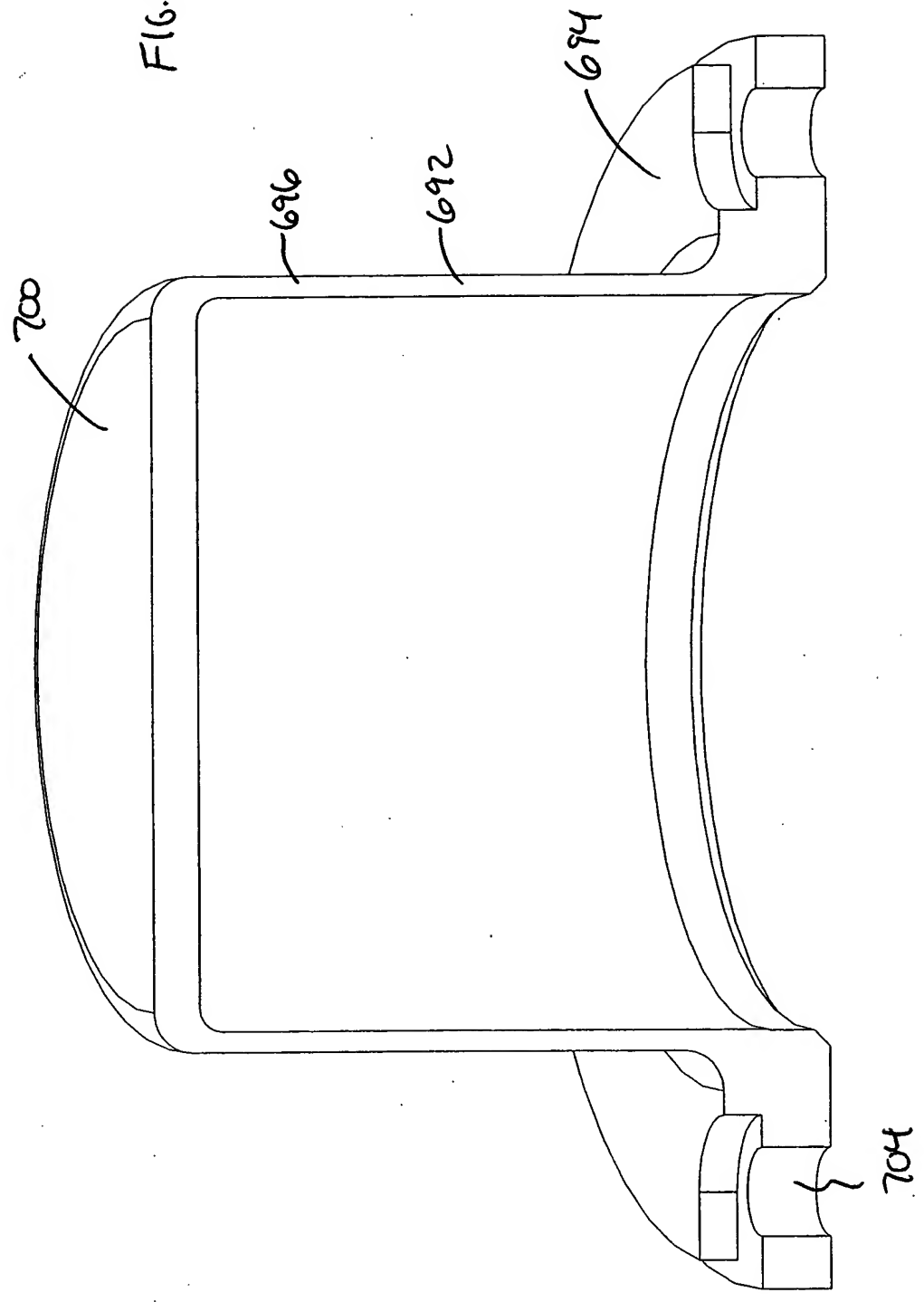


FIG. 87



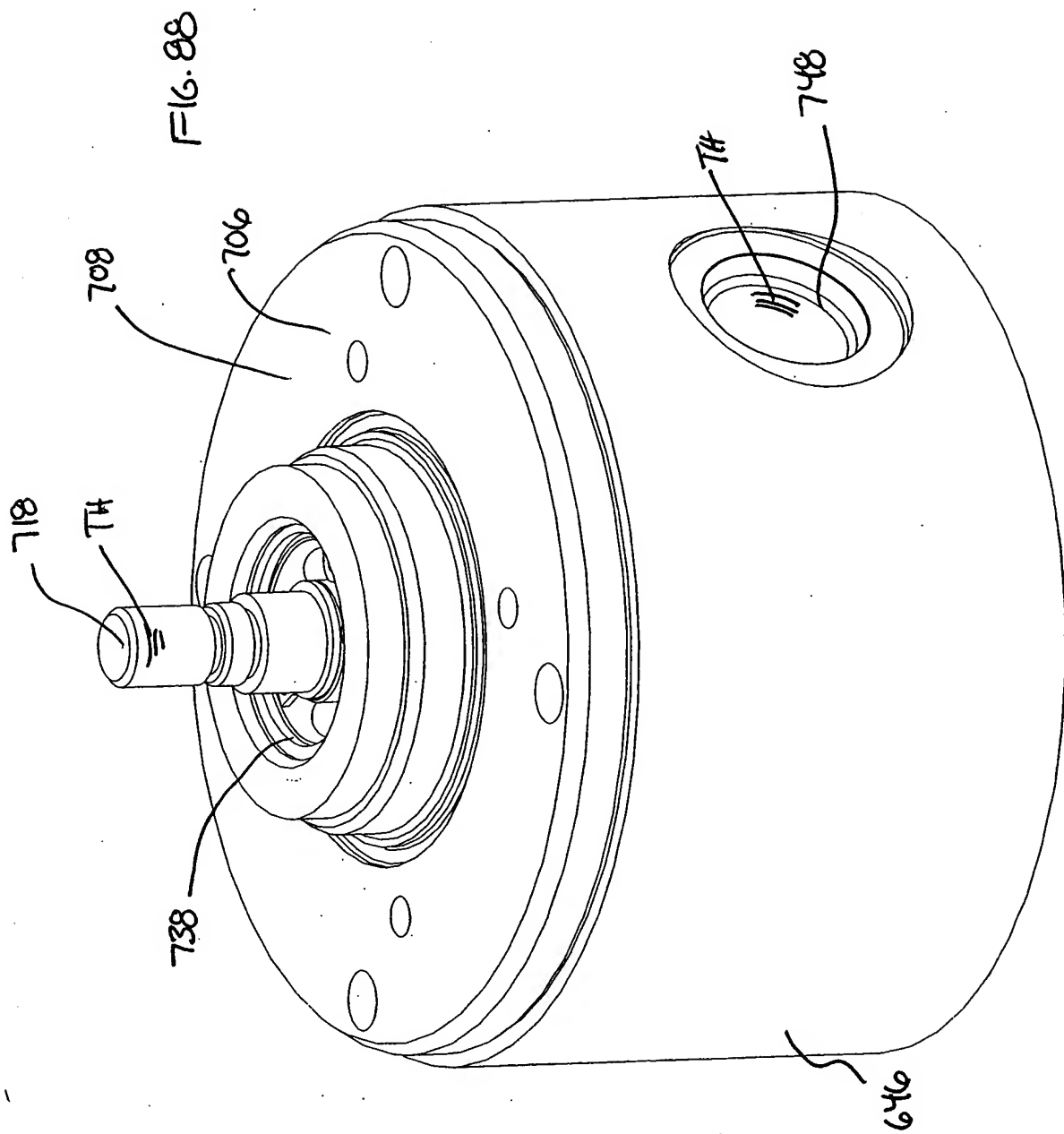


FIG. 89A

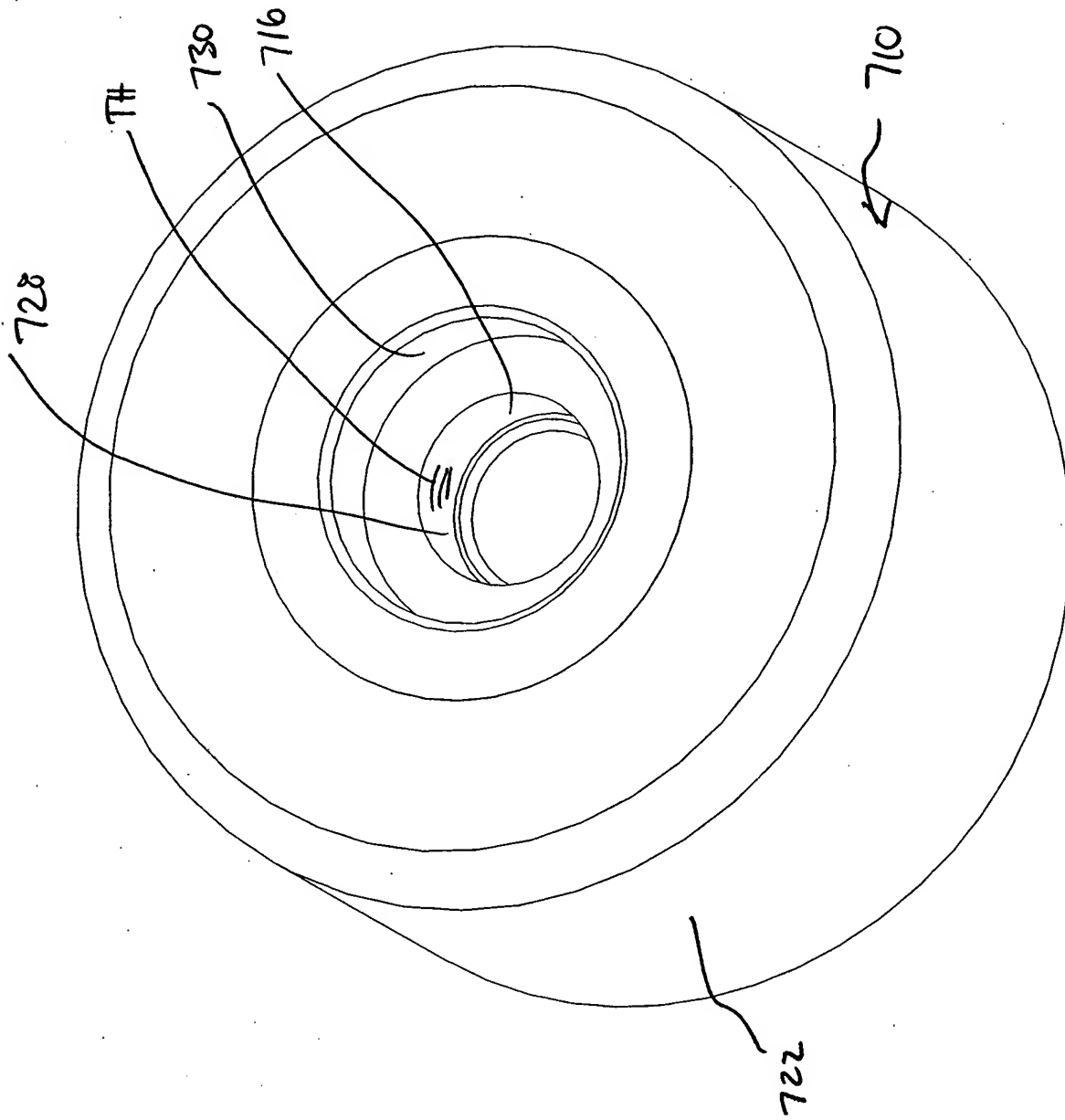


FIG. 81B

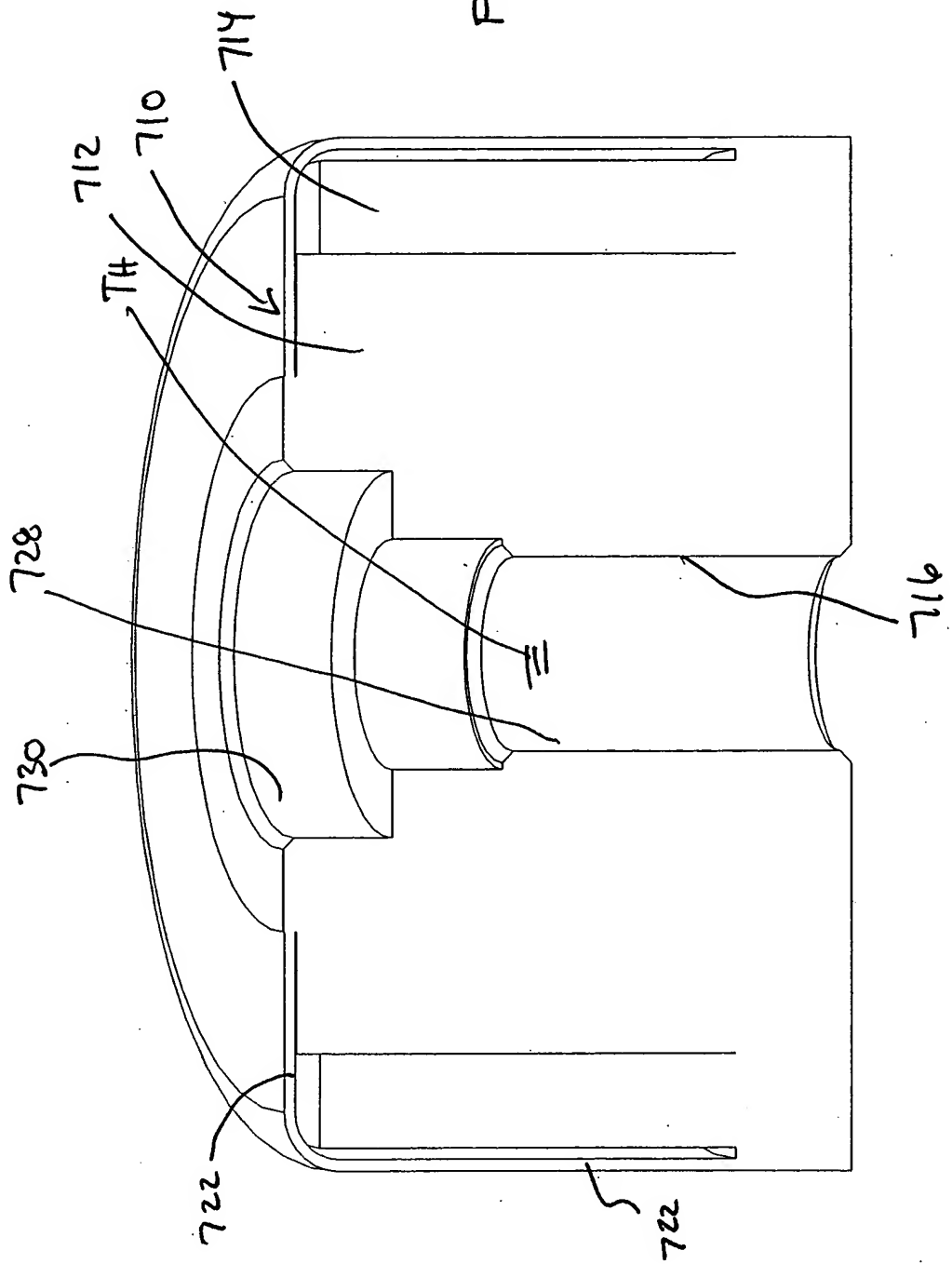
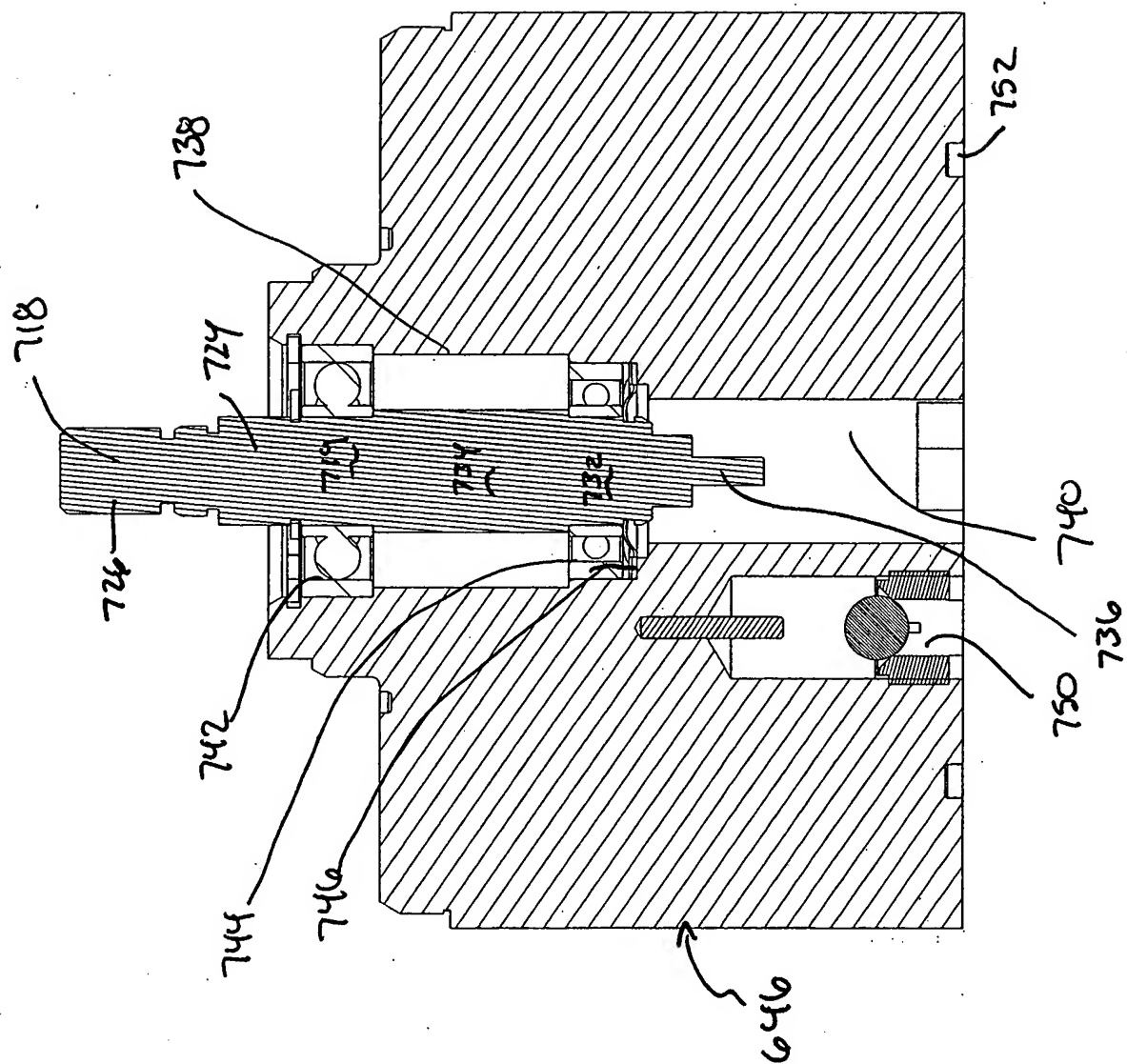


FIG. 90



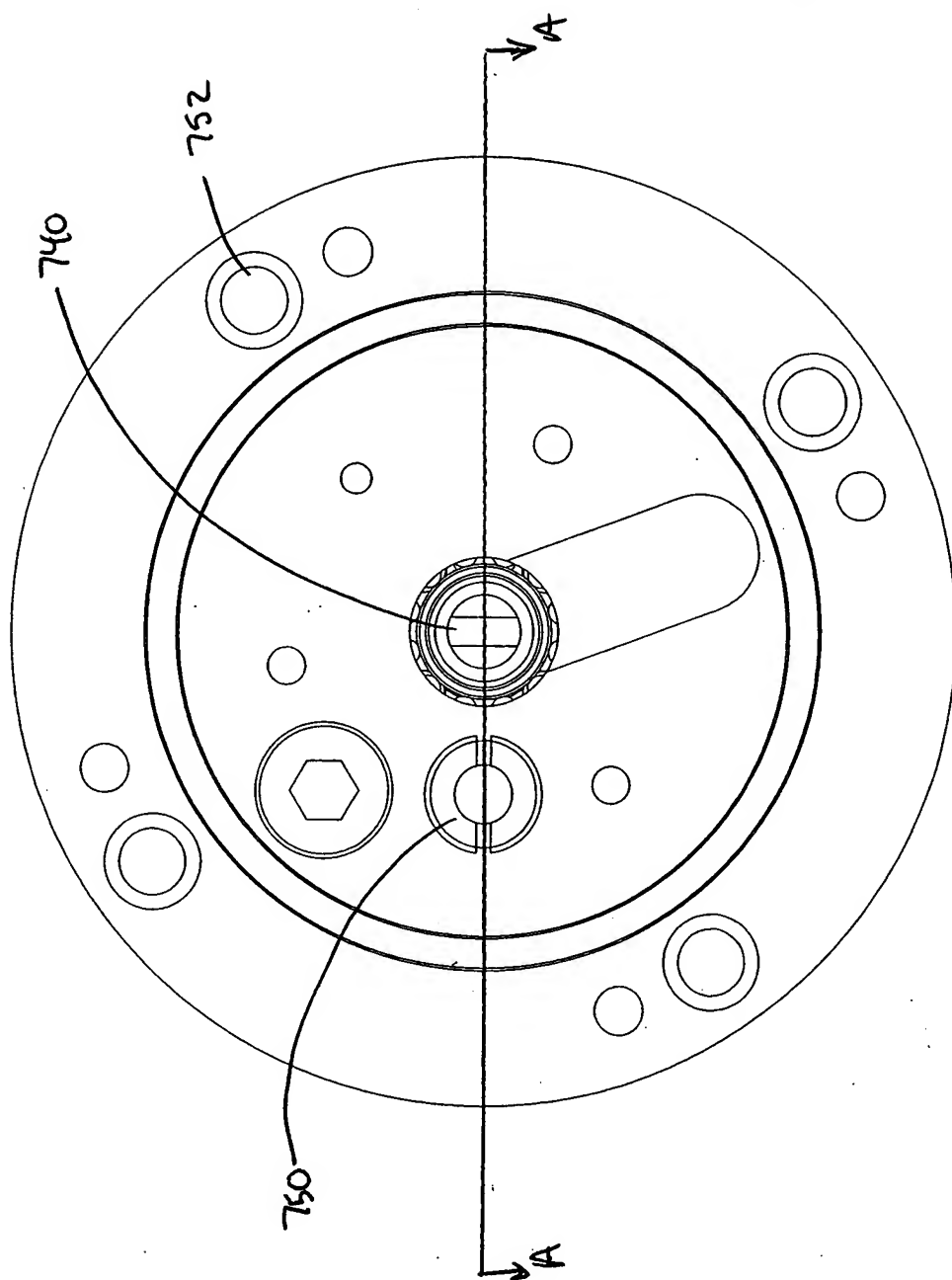
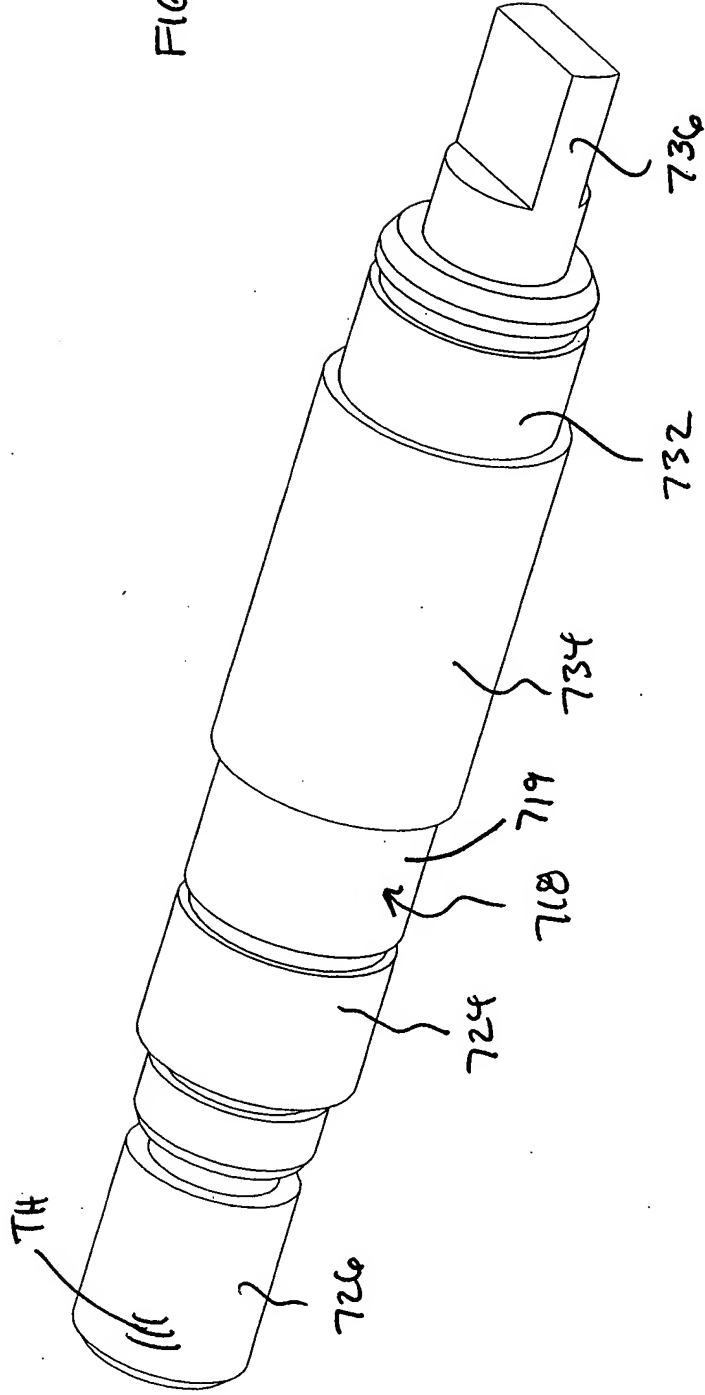


FIG. 91

FIG. 92



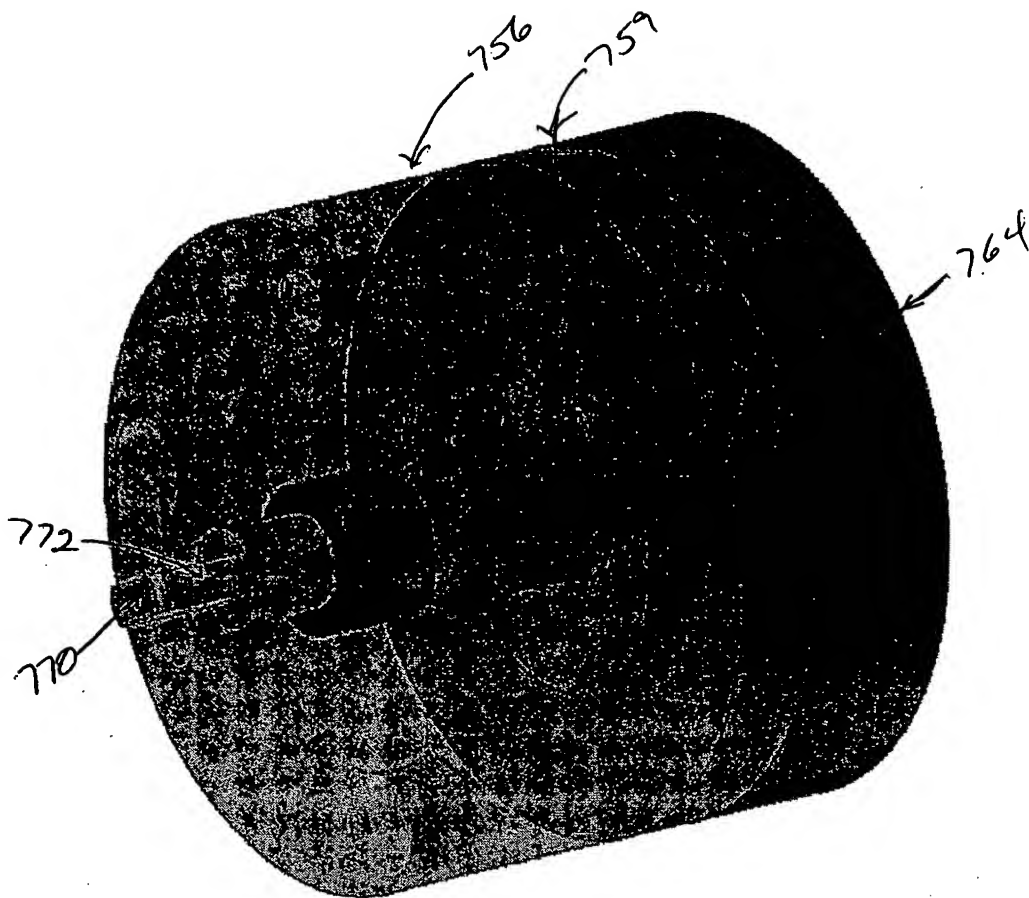


FIG. 93

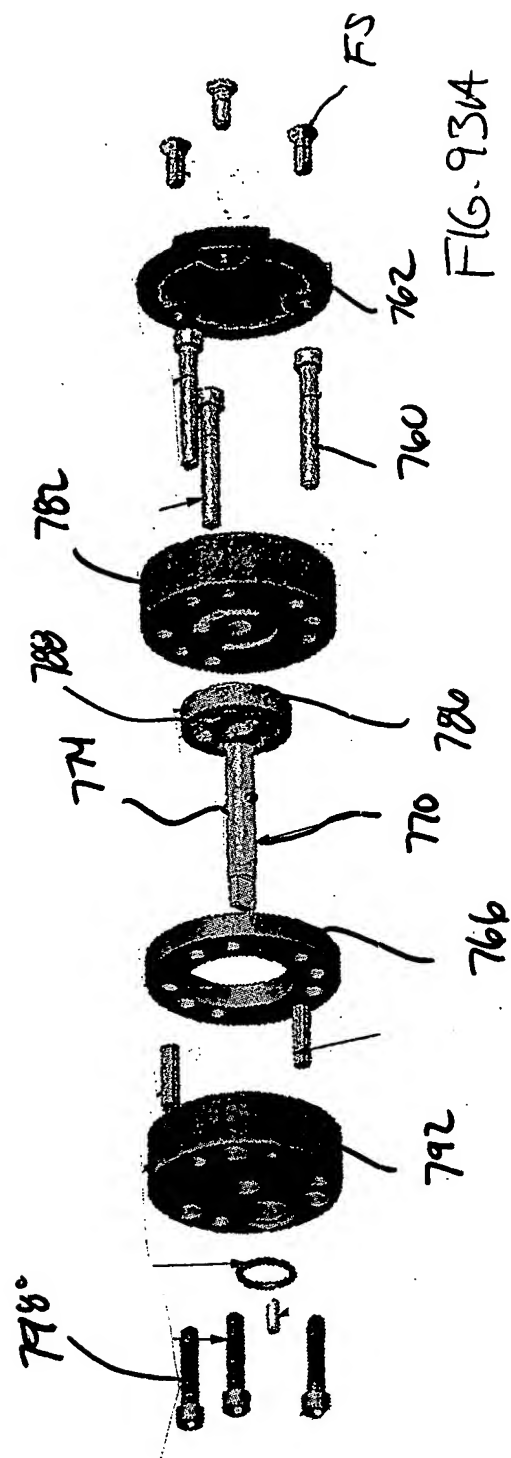


FIG. 93A

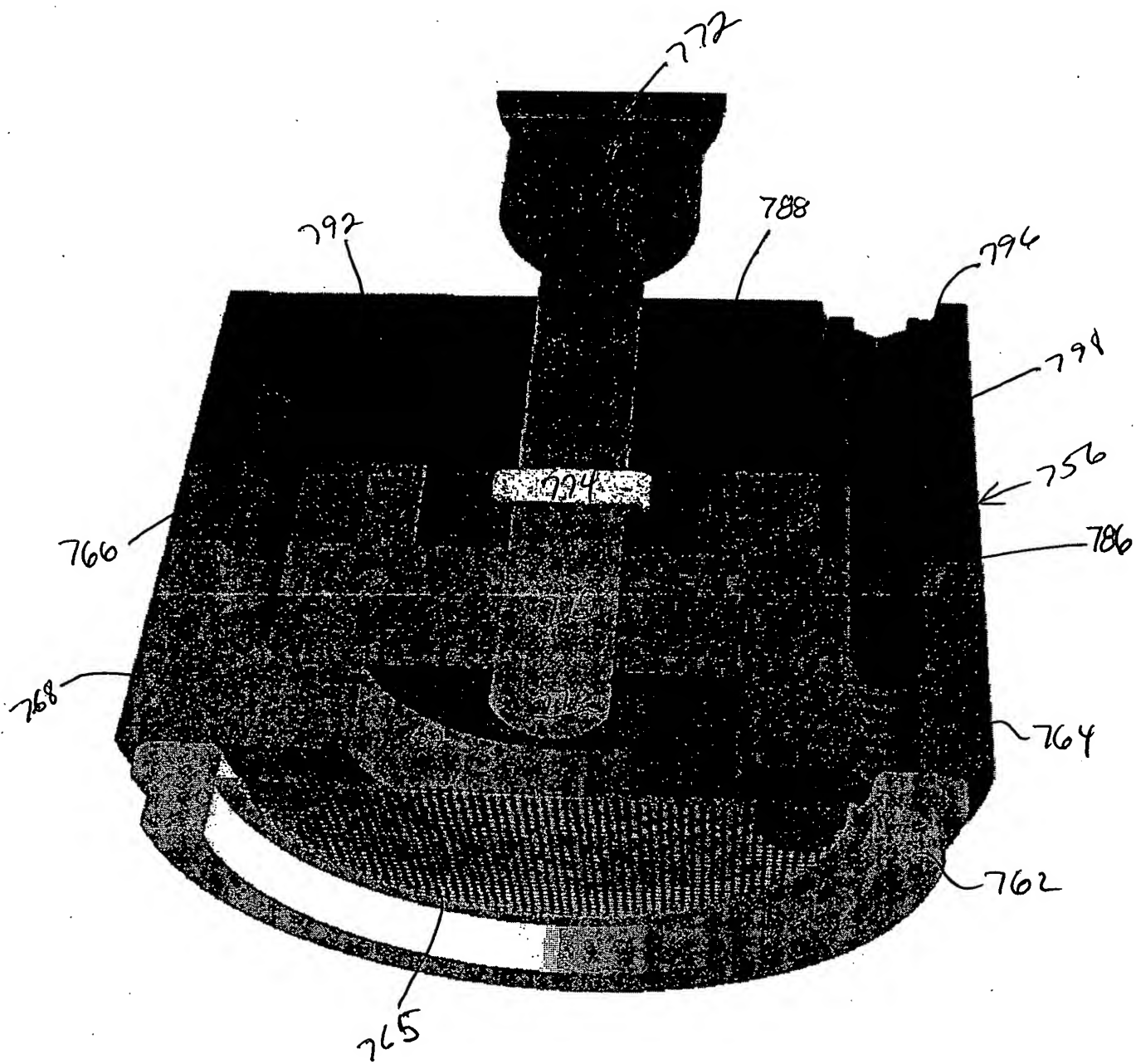


FIG. 94

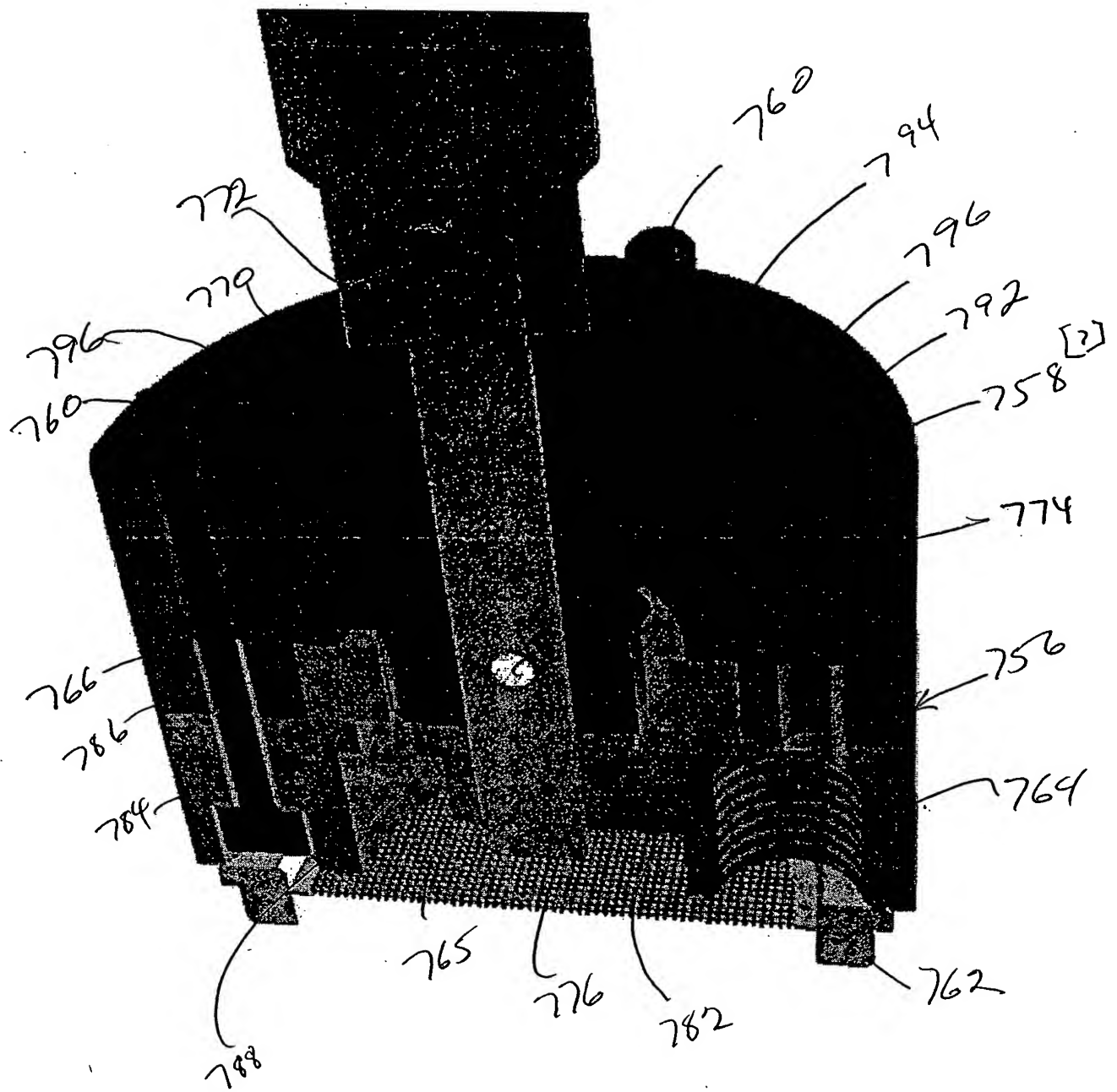
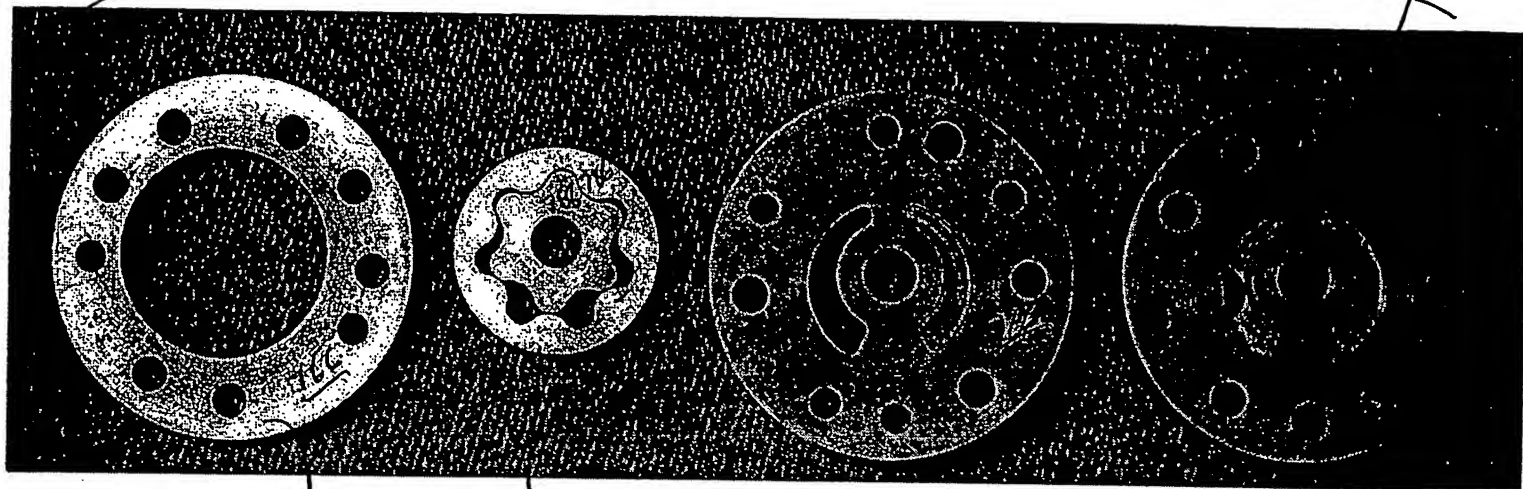


FIG. 95

FIG. 96

794



766

768

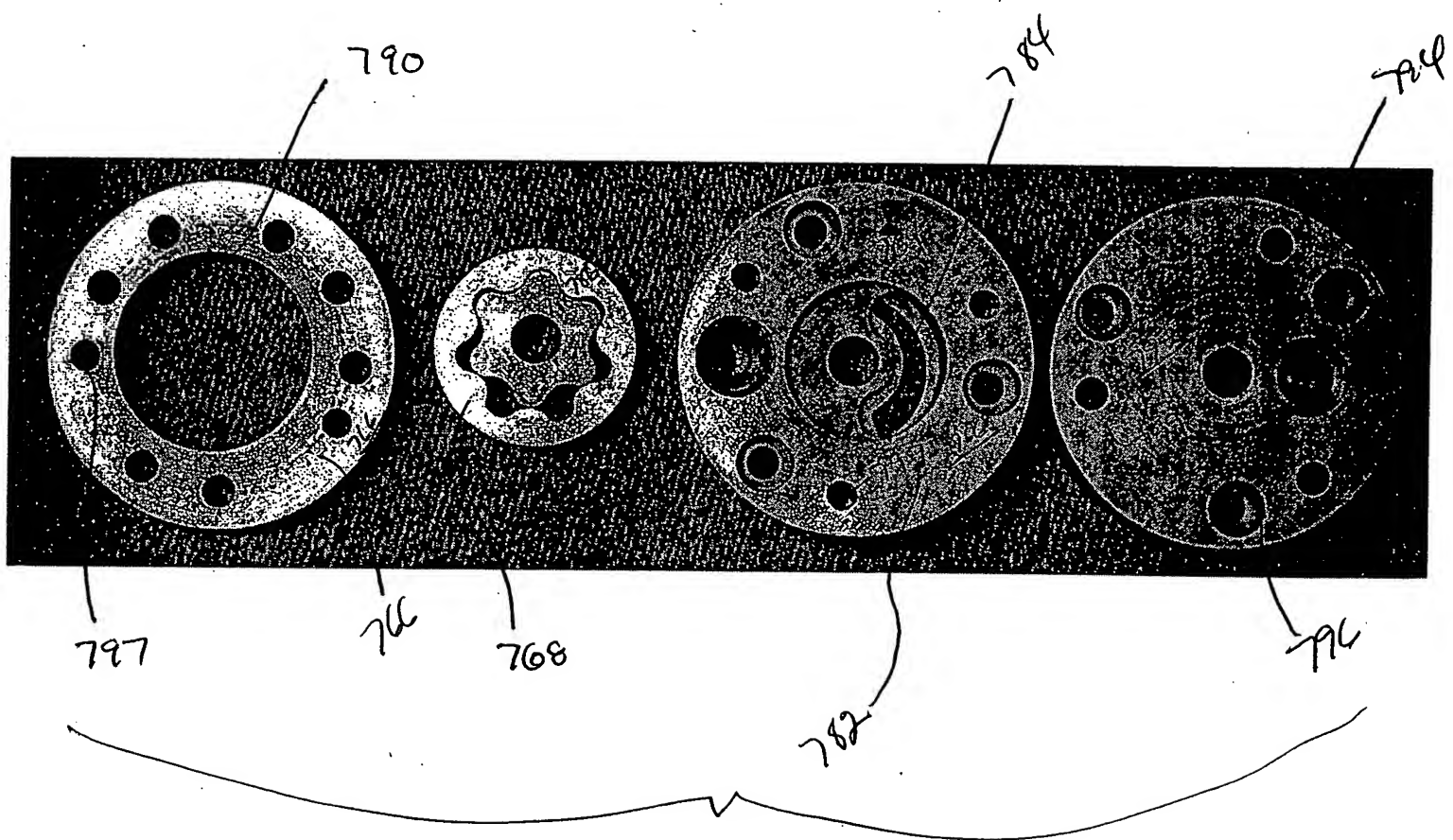


FIG. 97

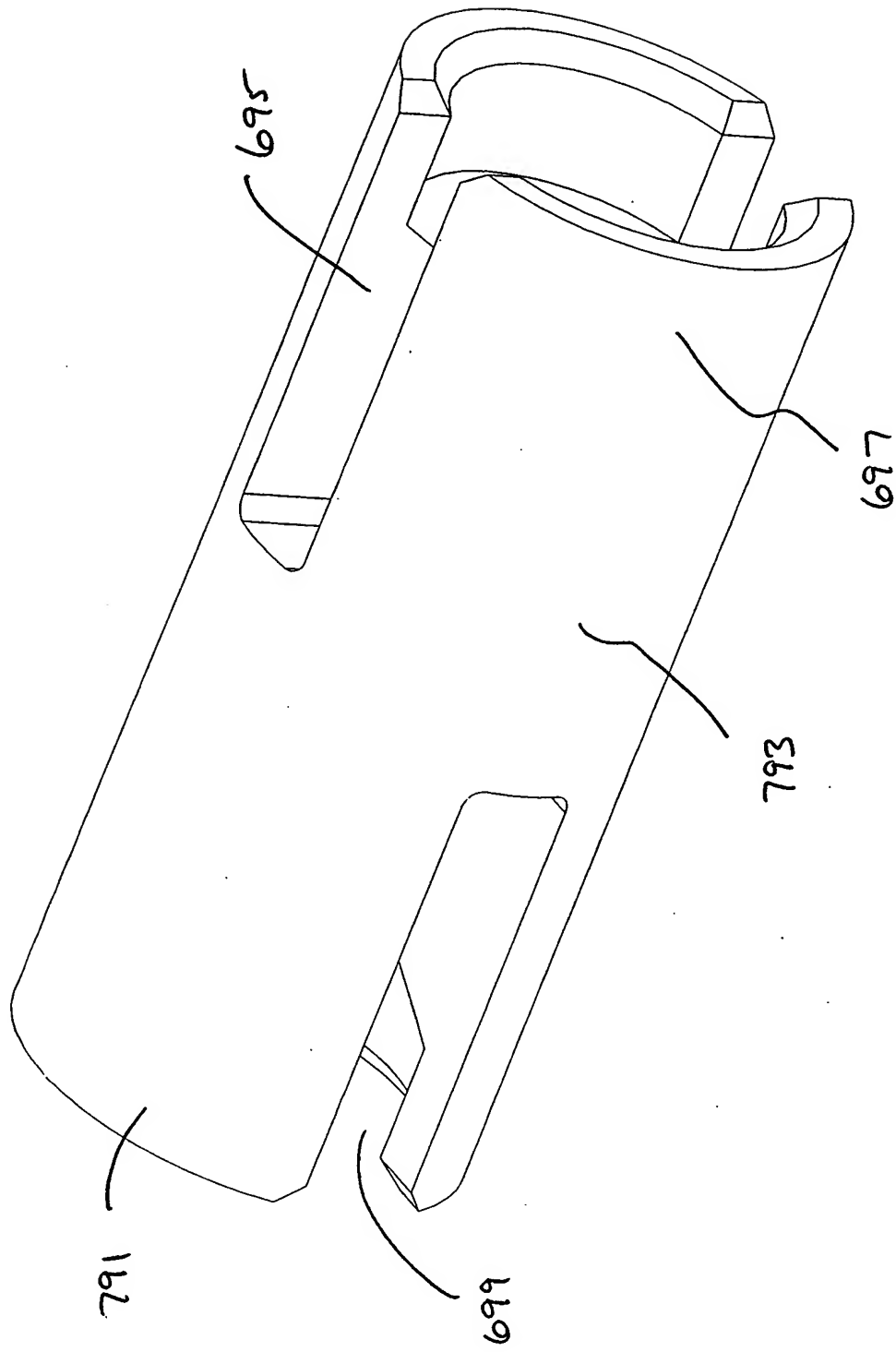


FIG. 98

FIG. 99

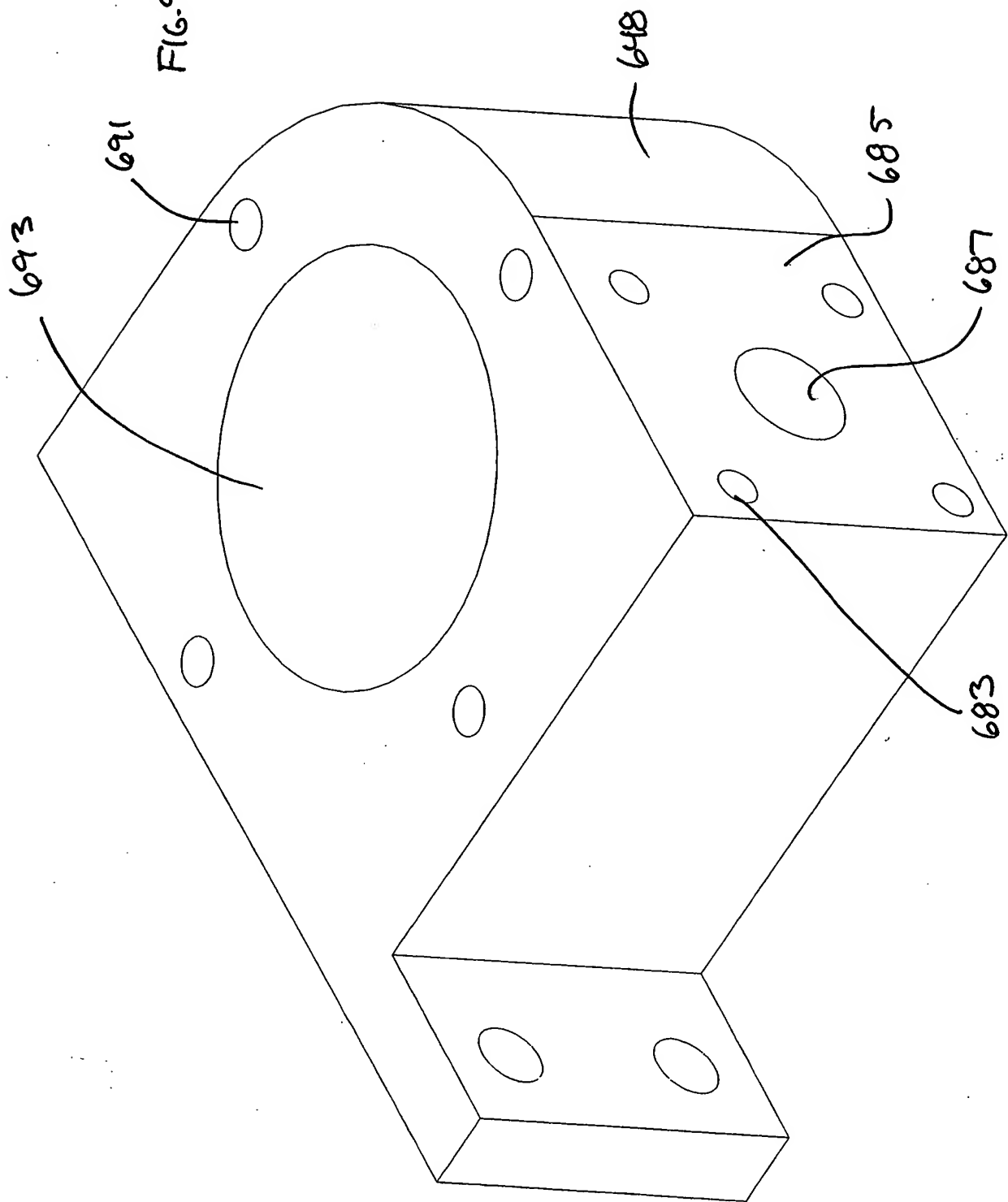
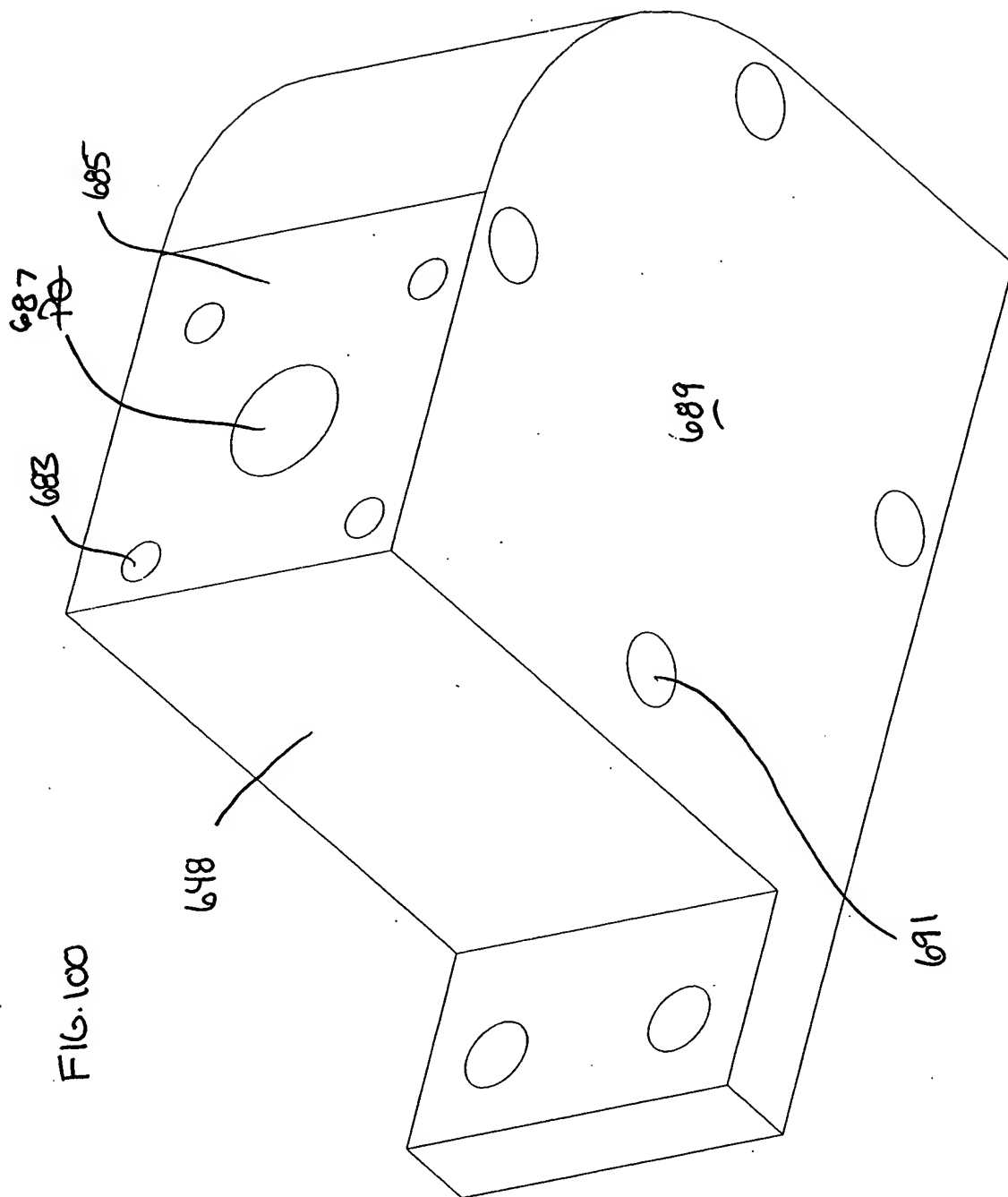
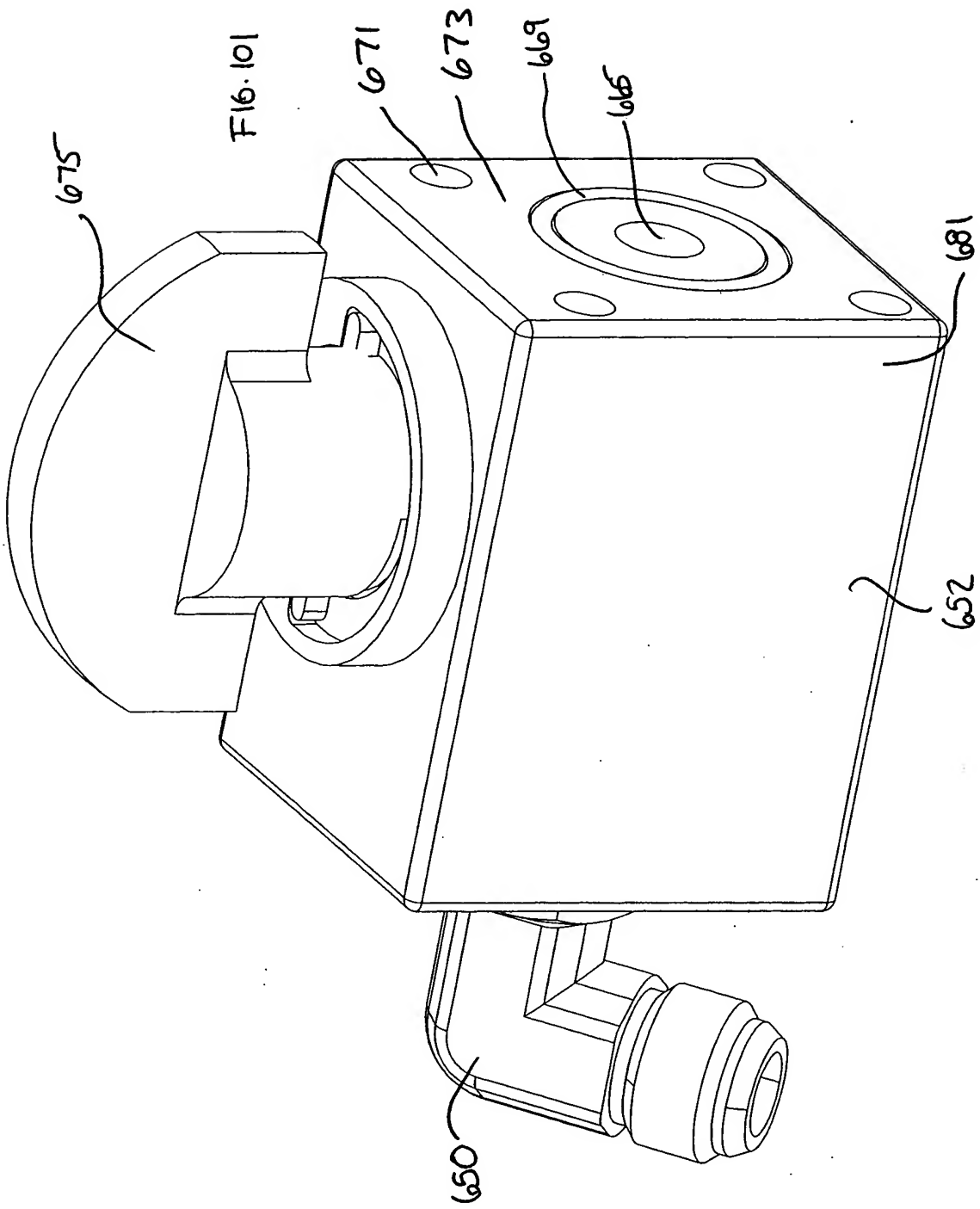


FIG. 100





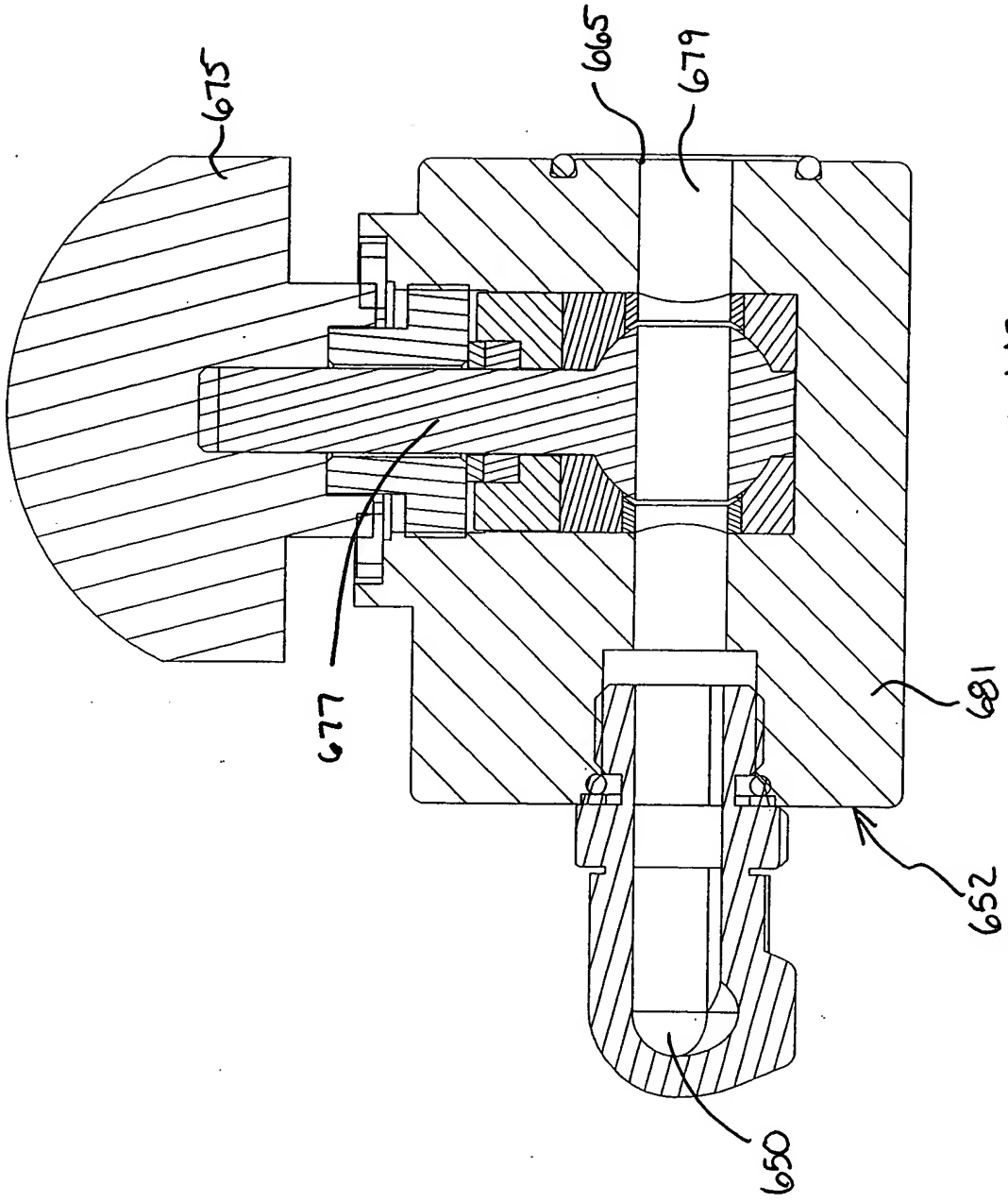
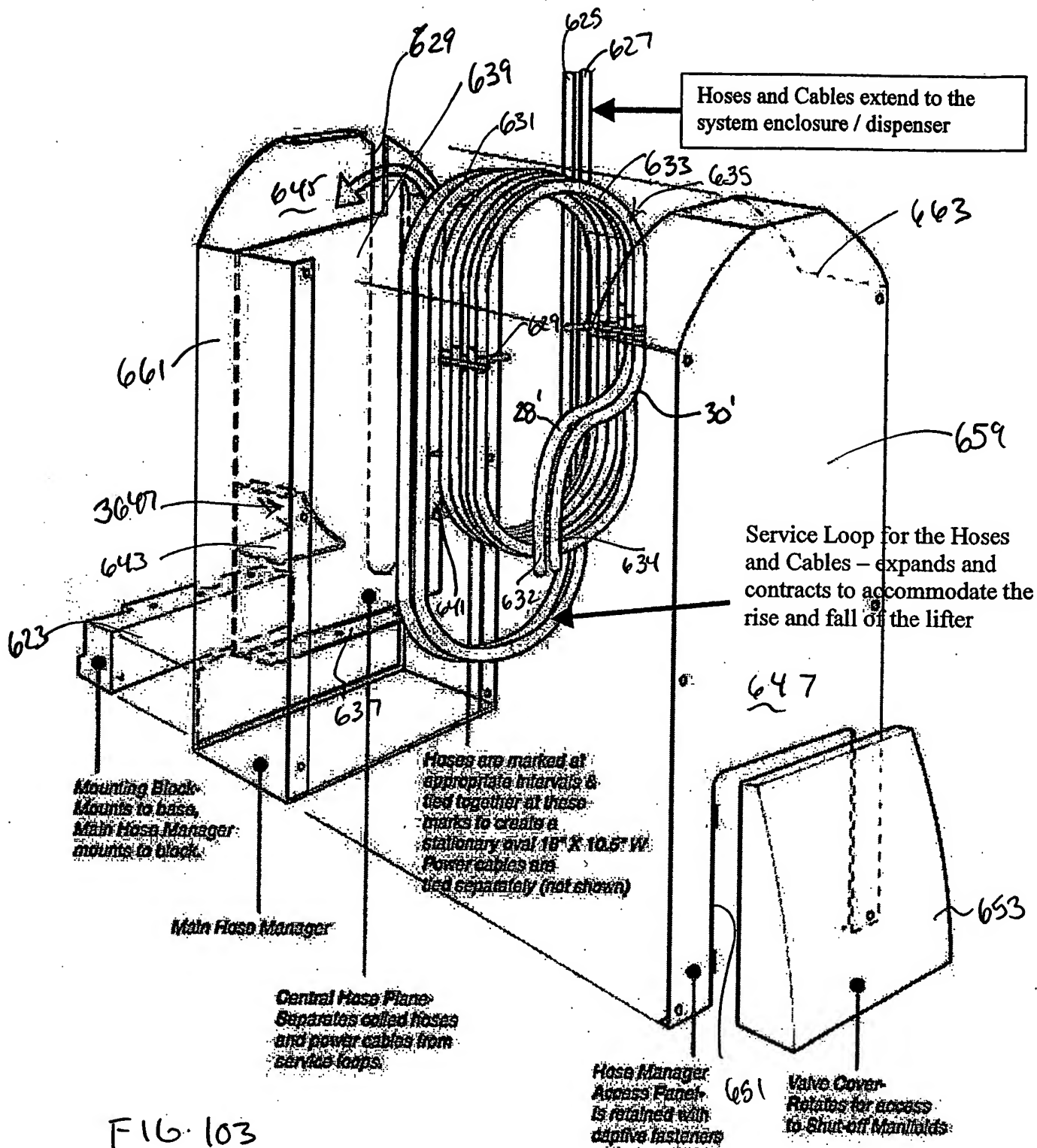


FIG. 102



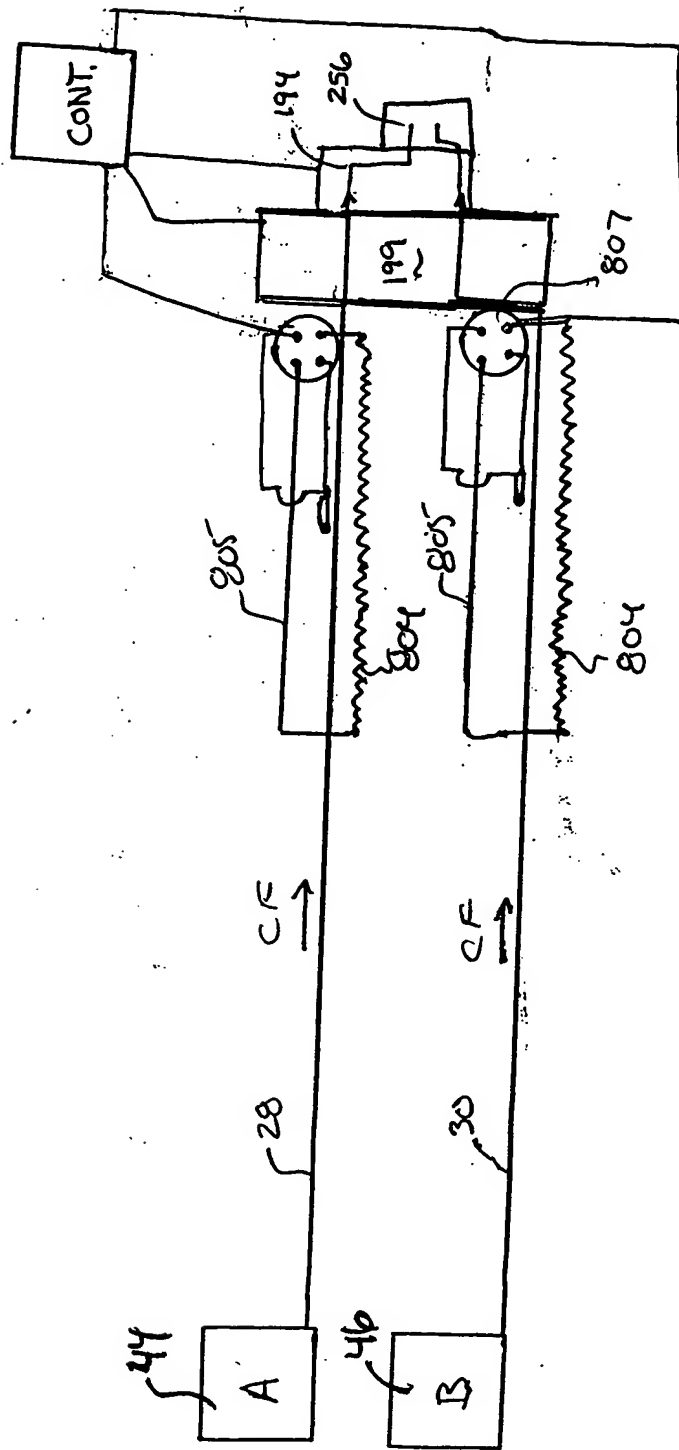


FIG. 104

FIG. 10S

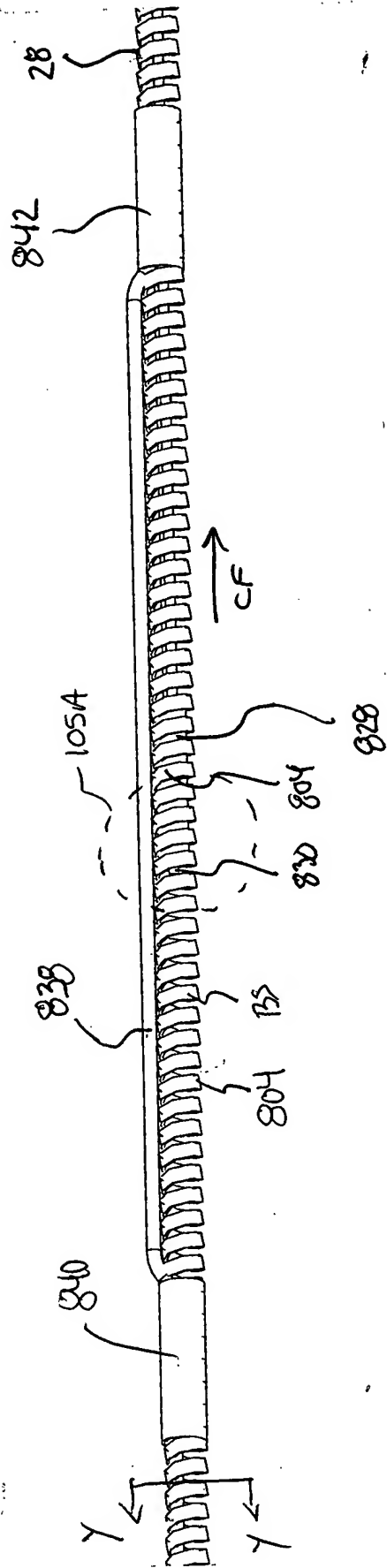
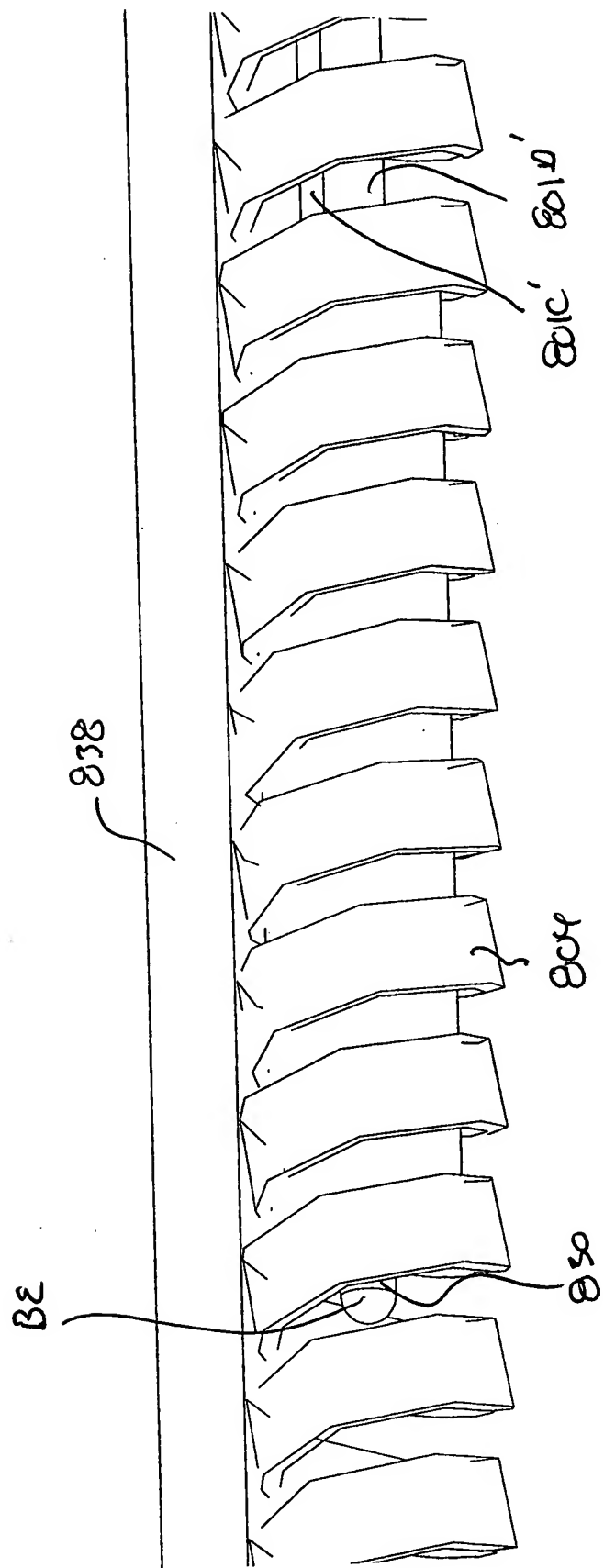
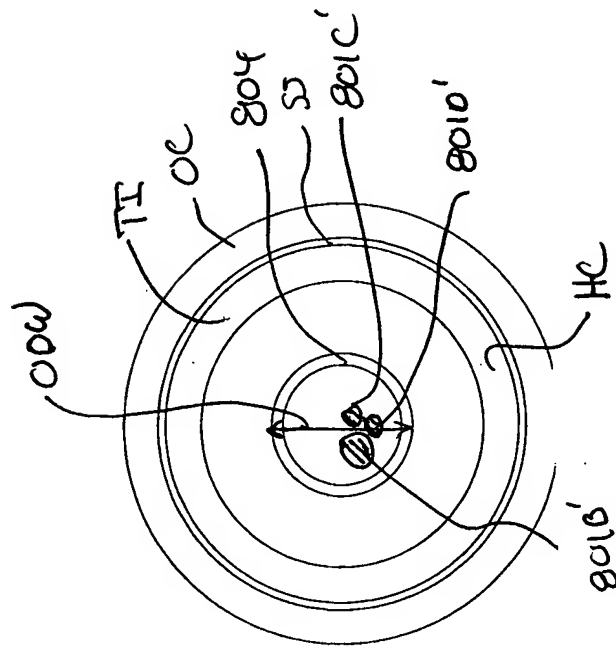


FIG. 105A



FLG. 106



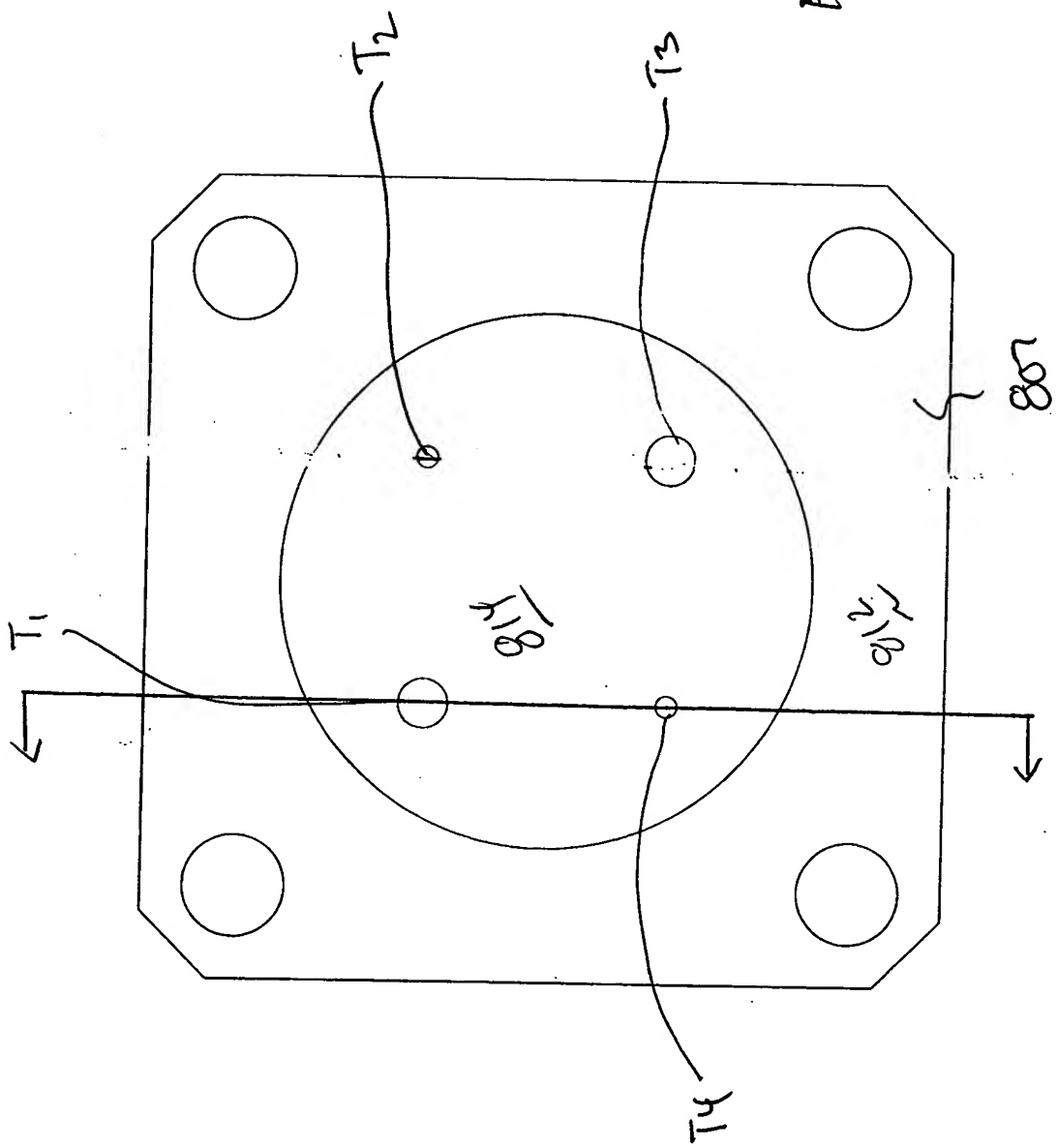


FIG. 107

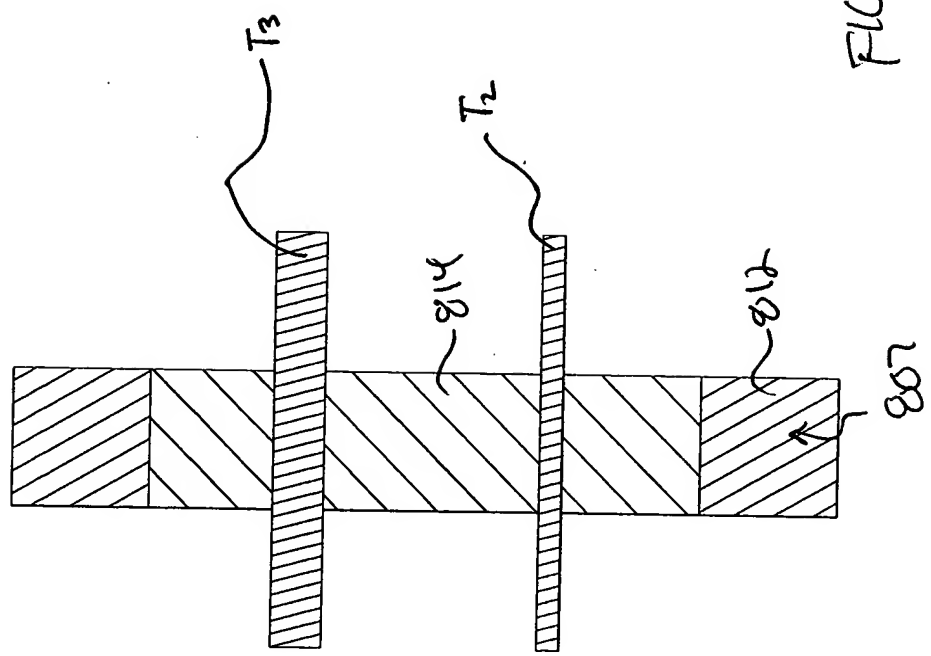


FIG. 108

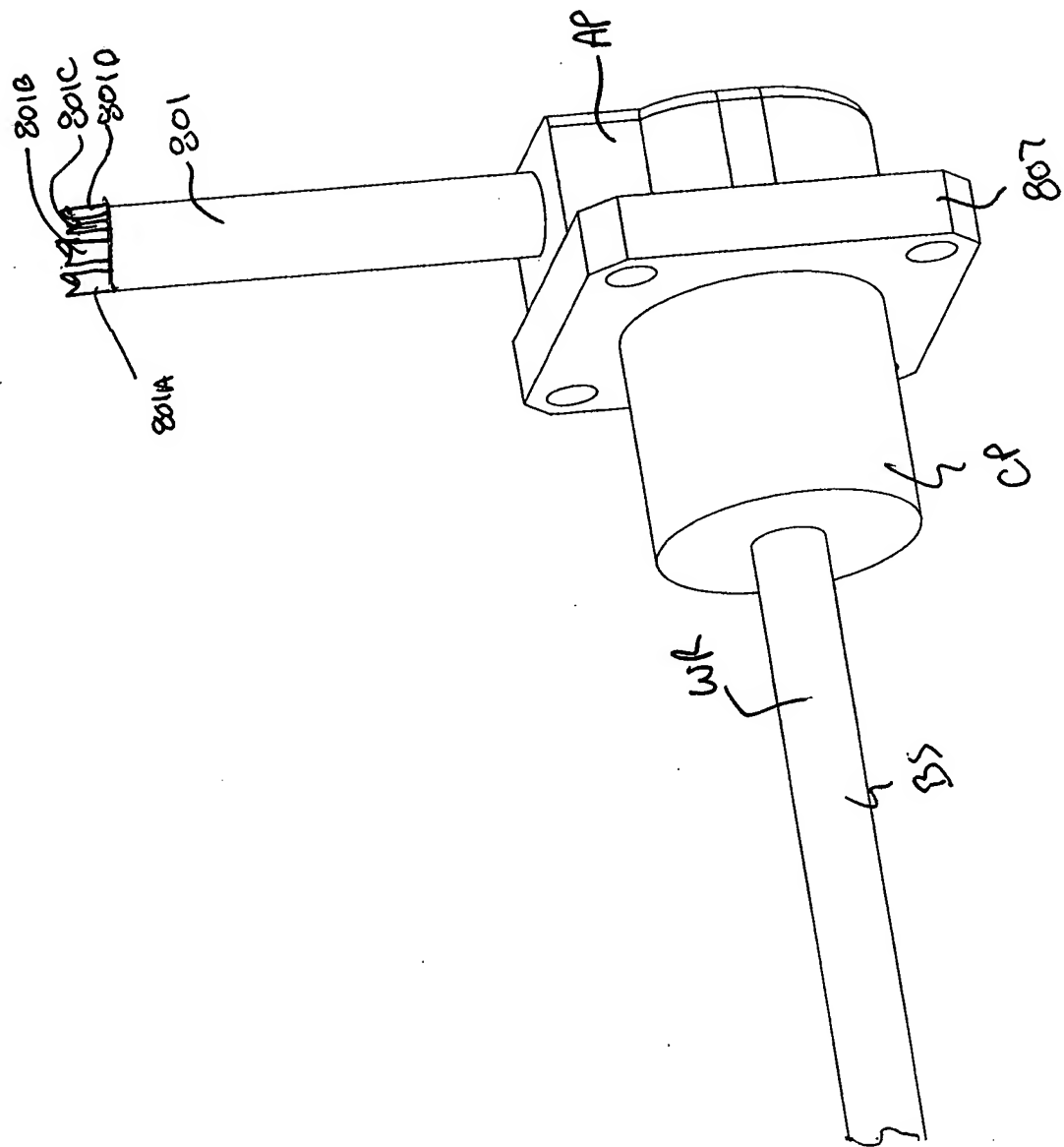
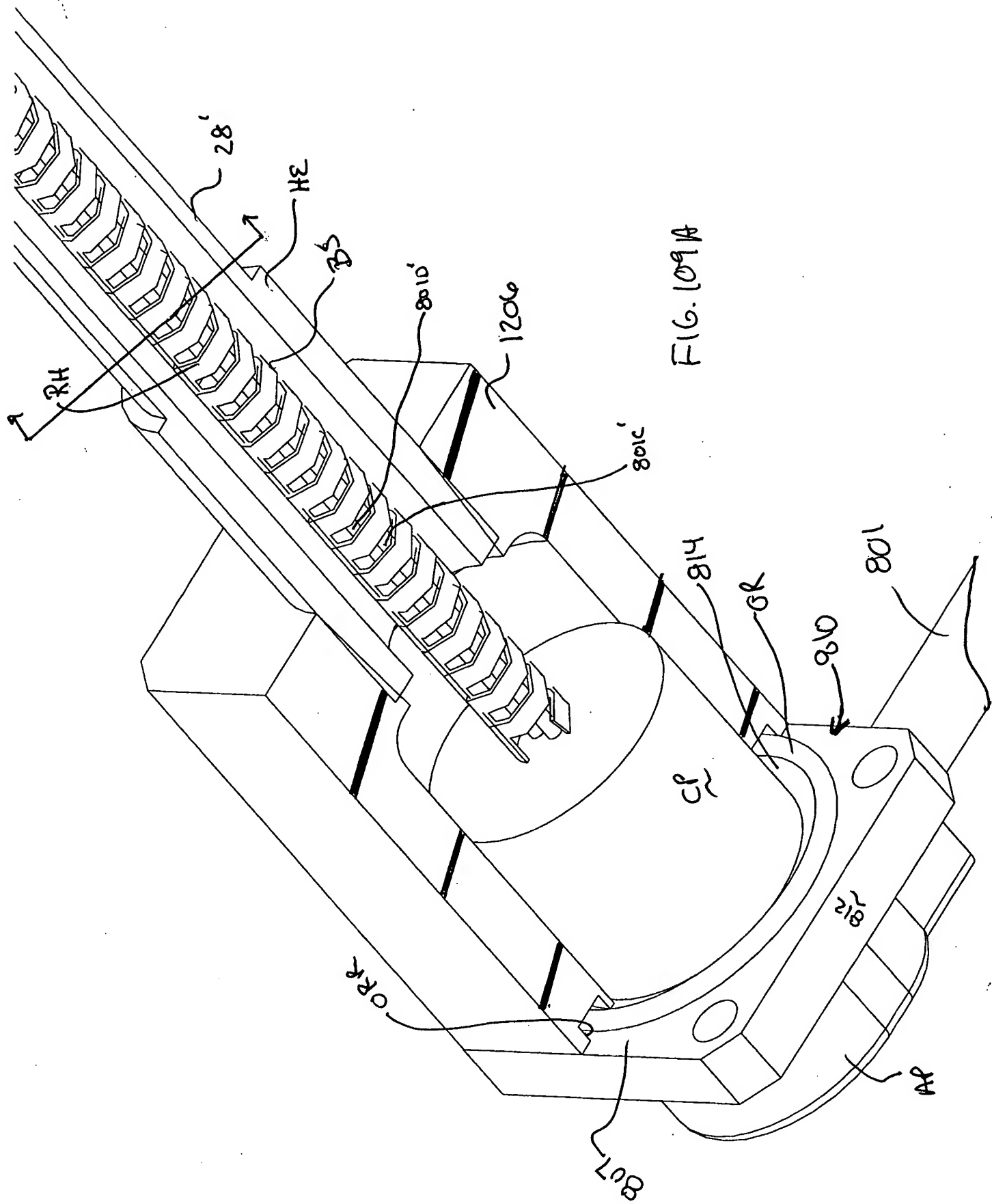


FIG. 109



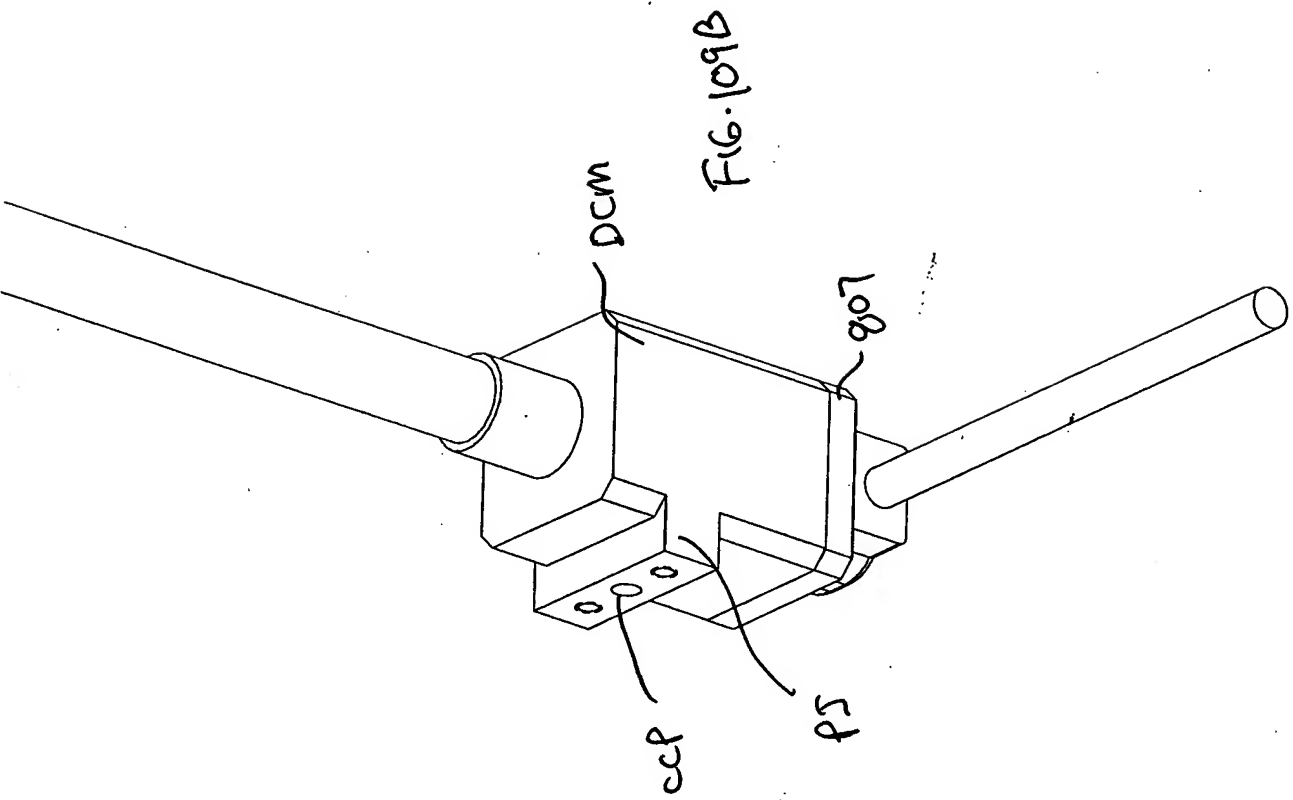
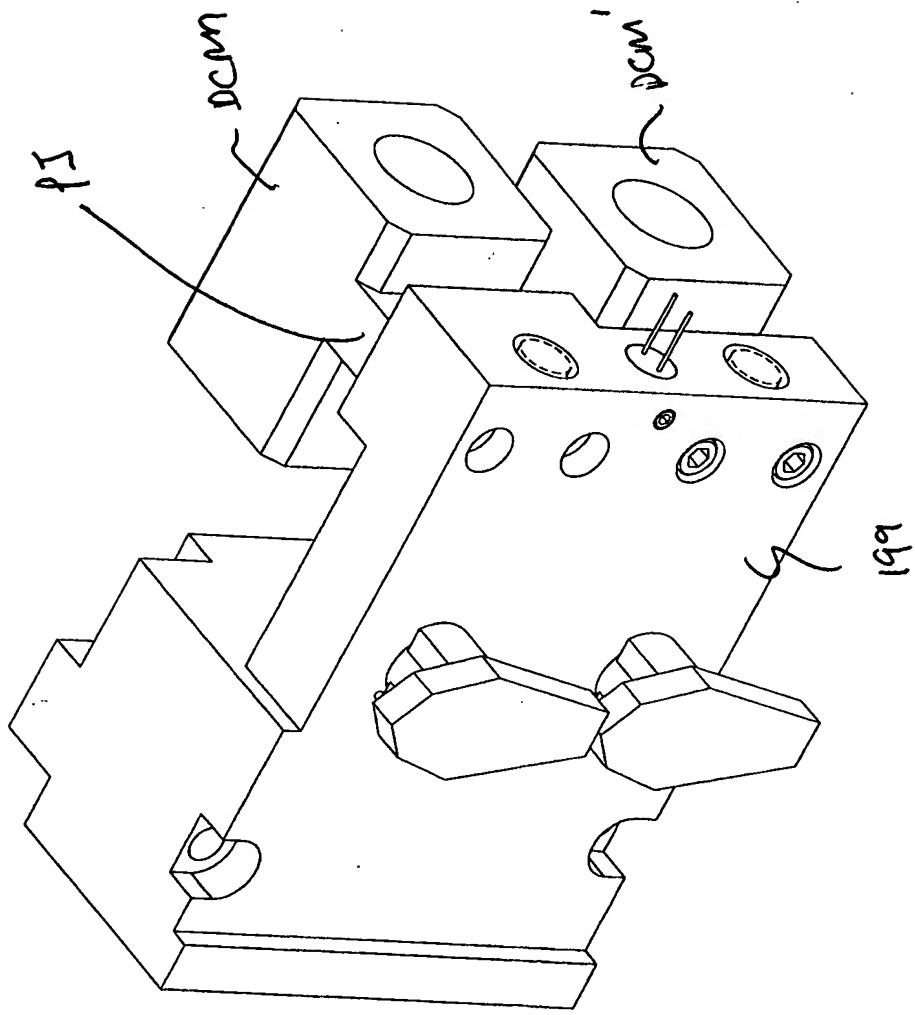


FIG. 109B



109C

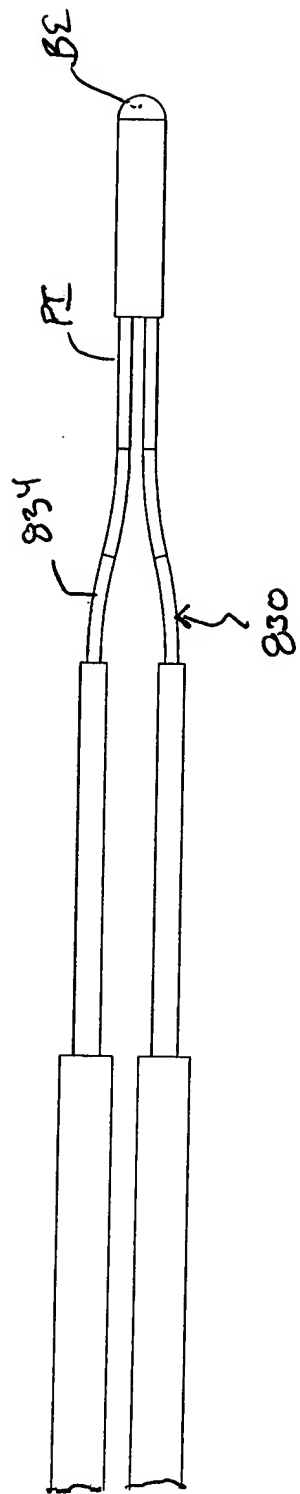


FIG. 110

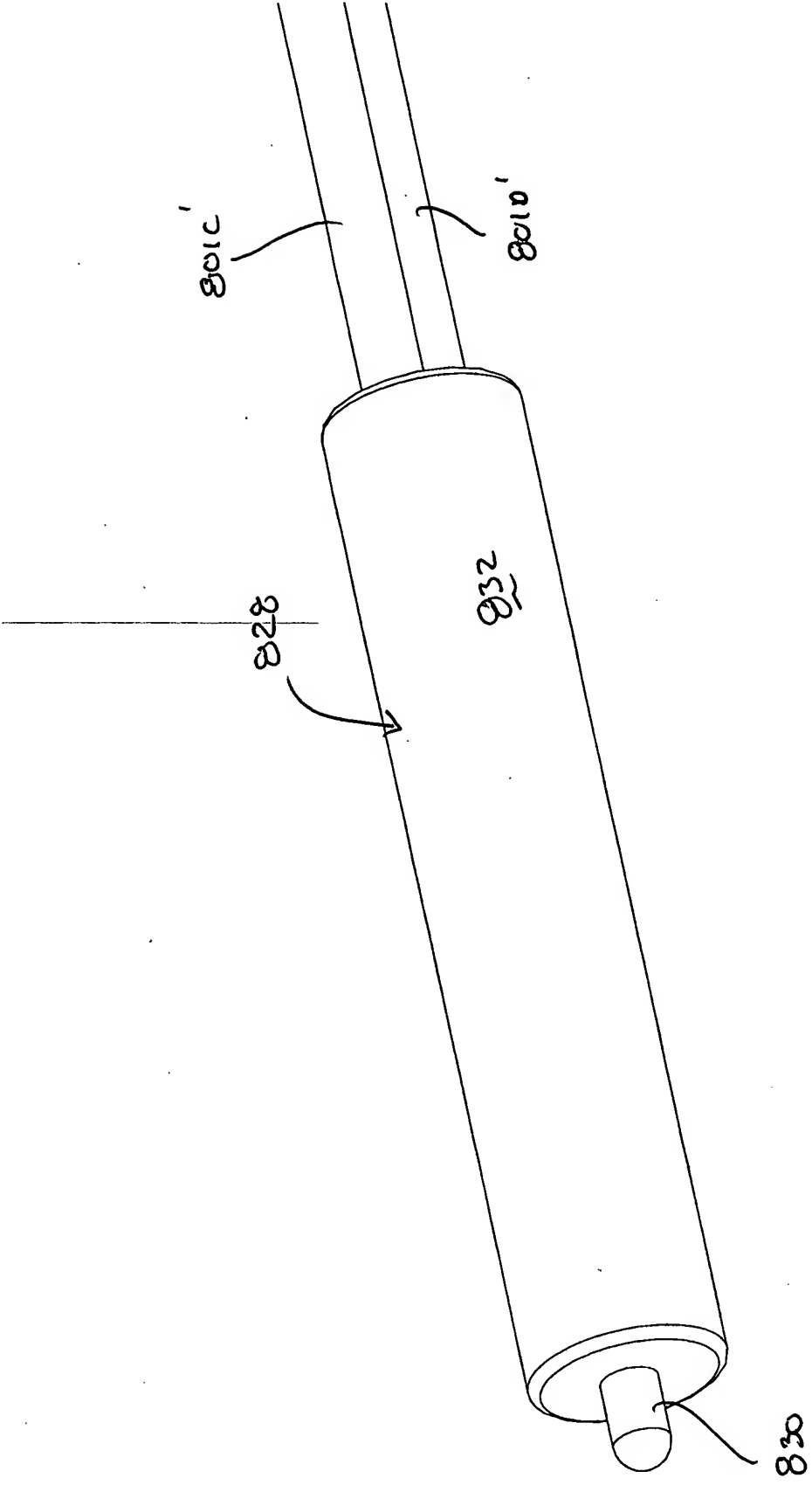


FIG. 110A

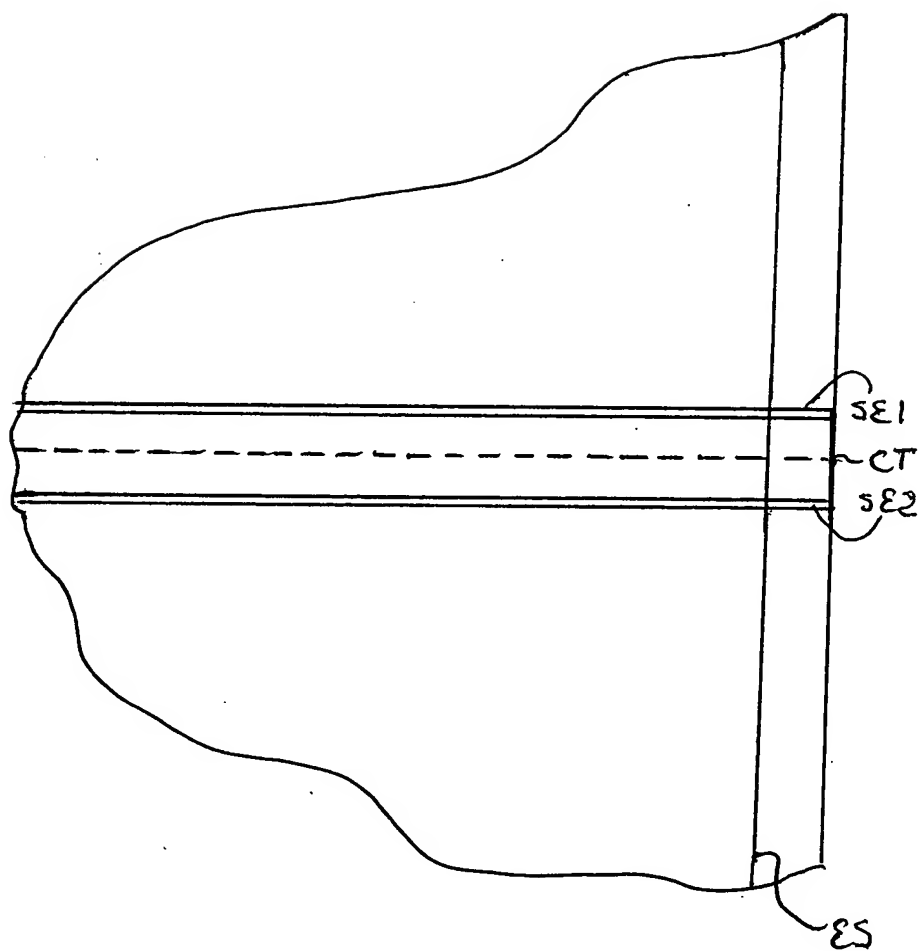


FIG. III

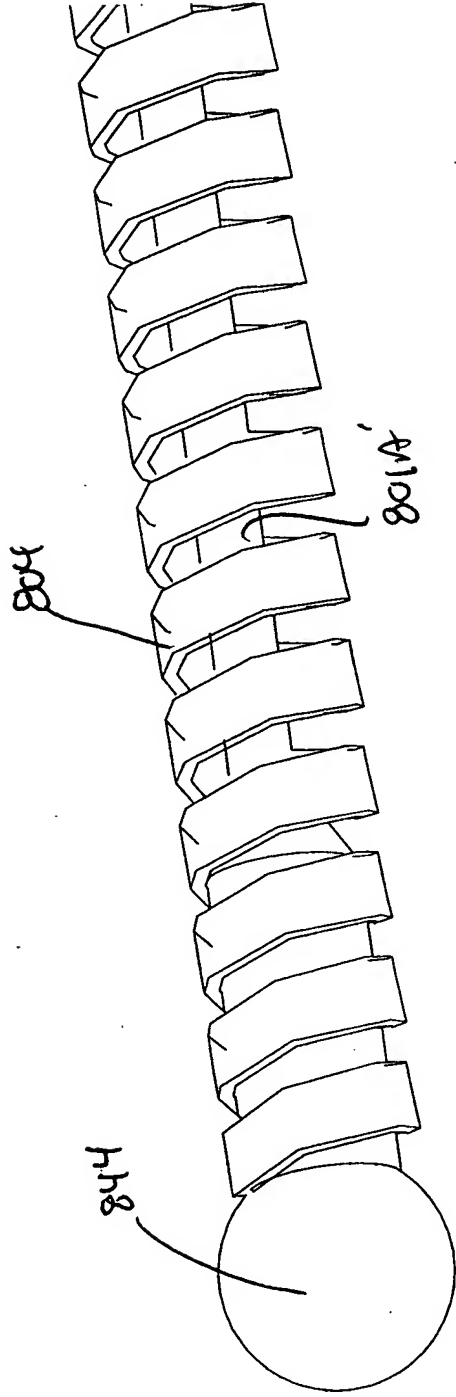


FIG. 112

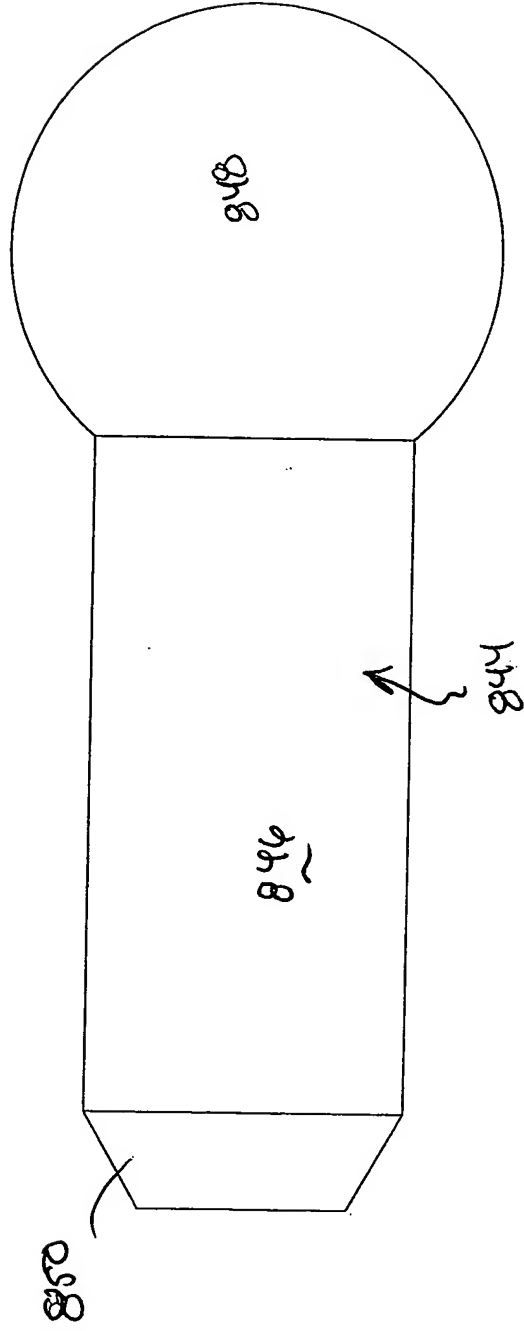


FIG. 113

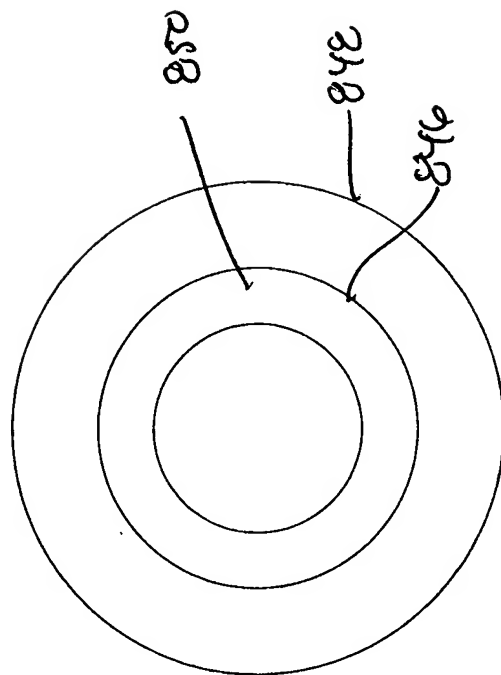


FIG. 113A

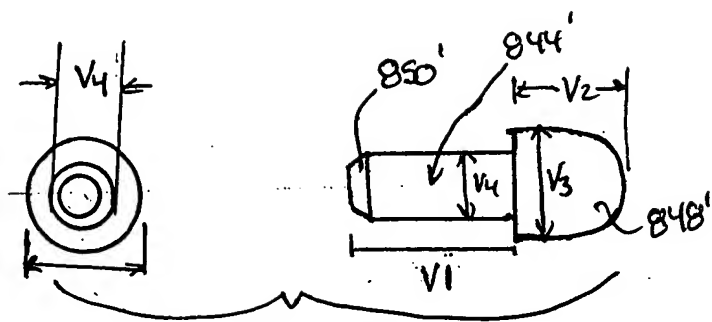
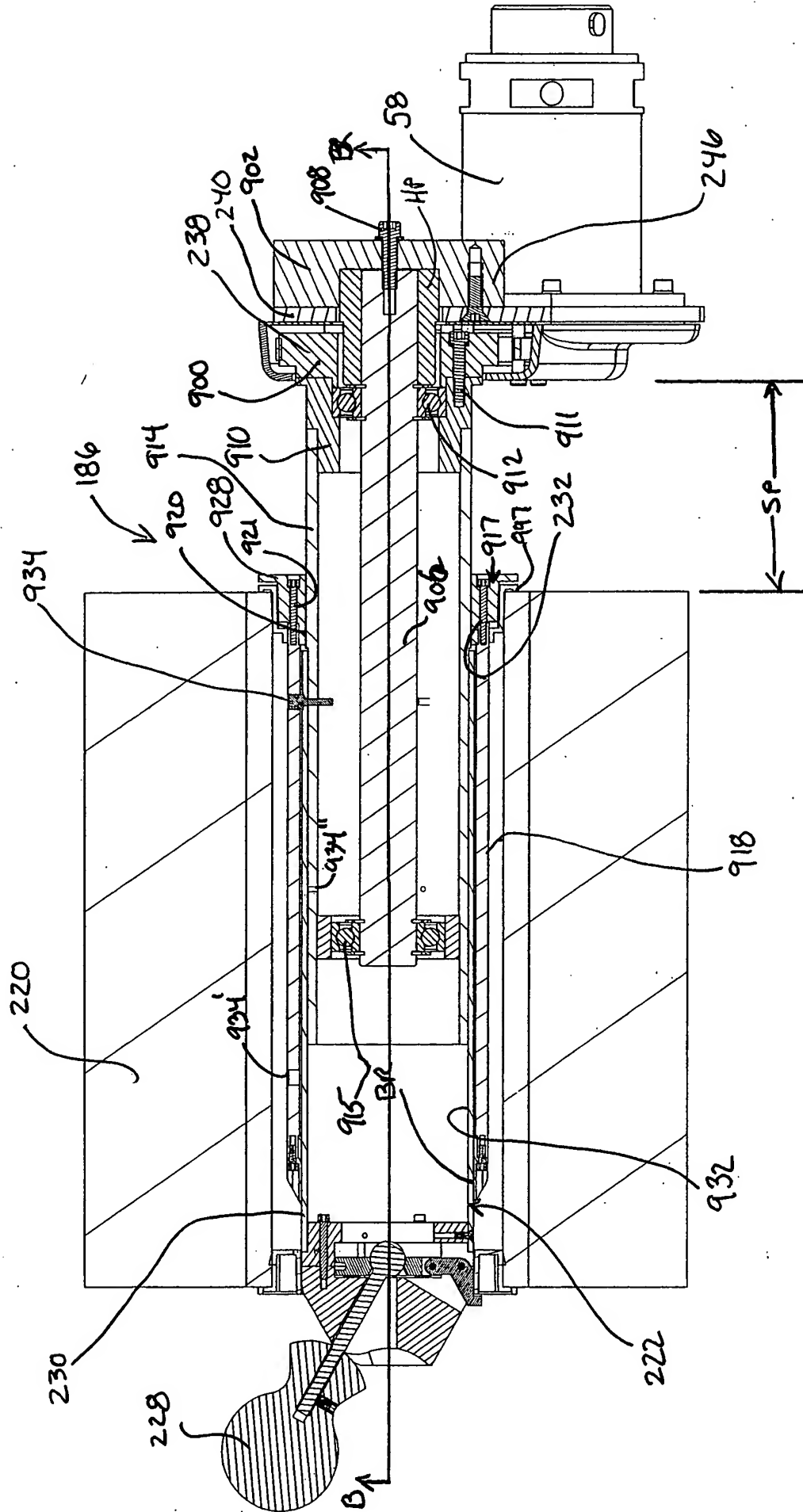
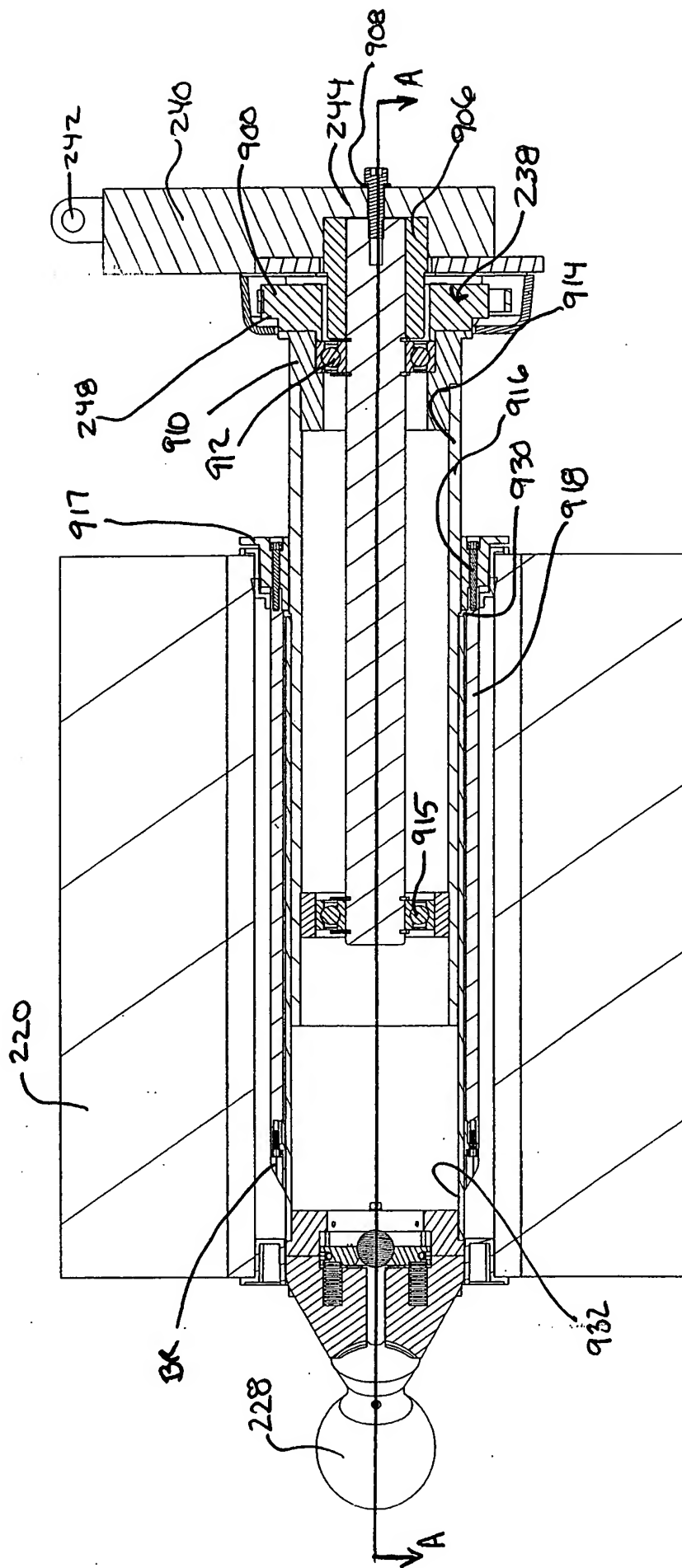
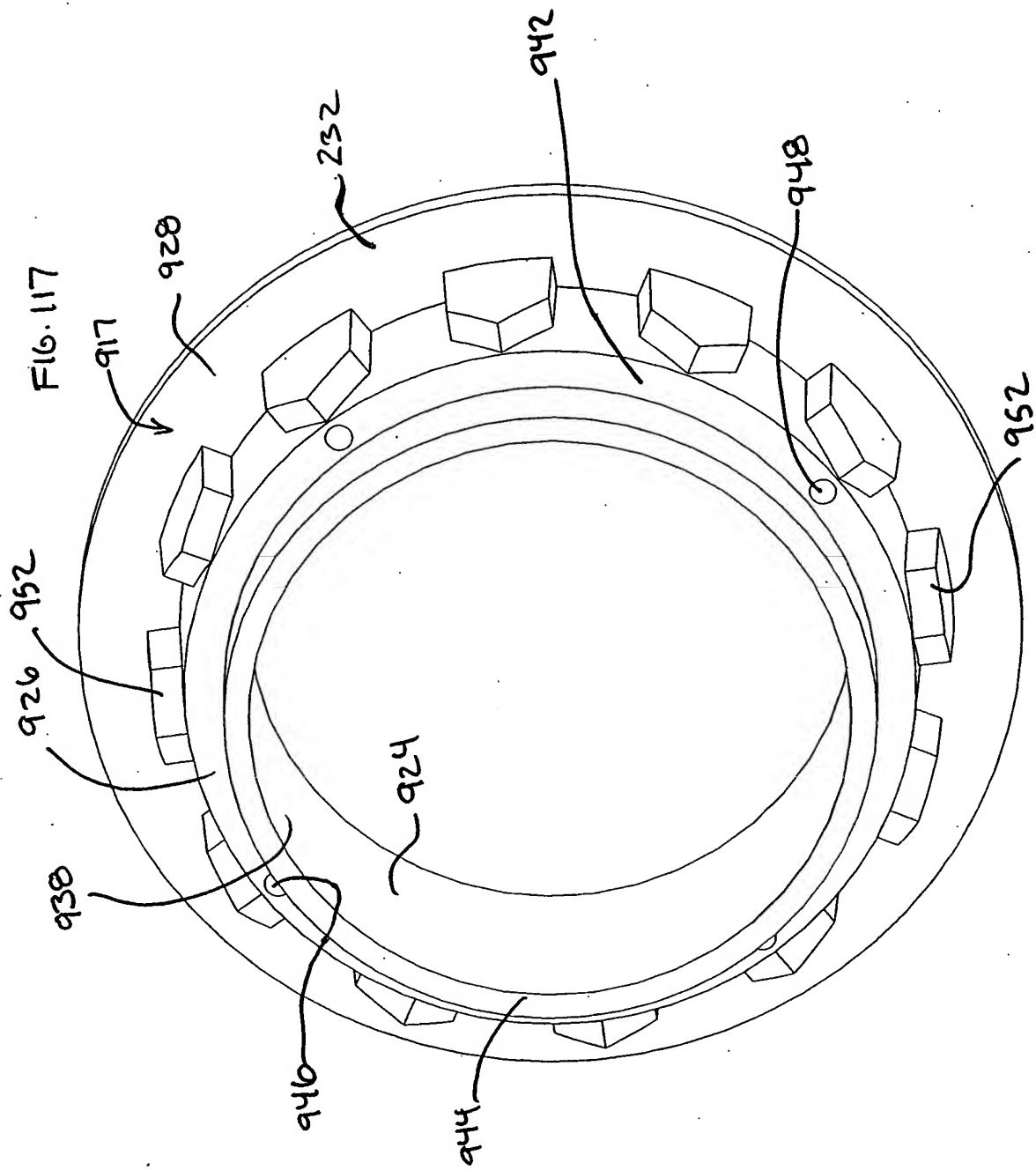


FIG. 114

[illegible]

File 116





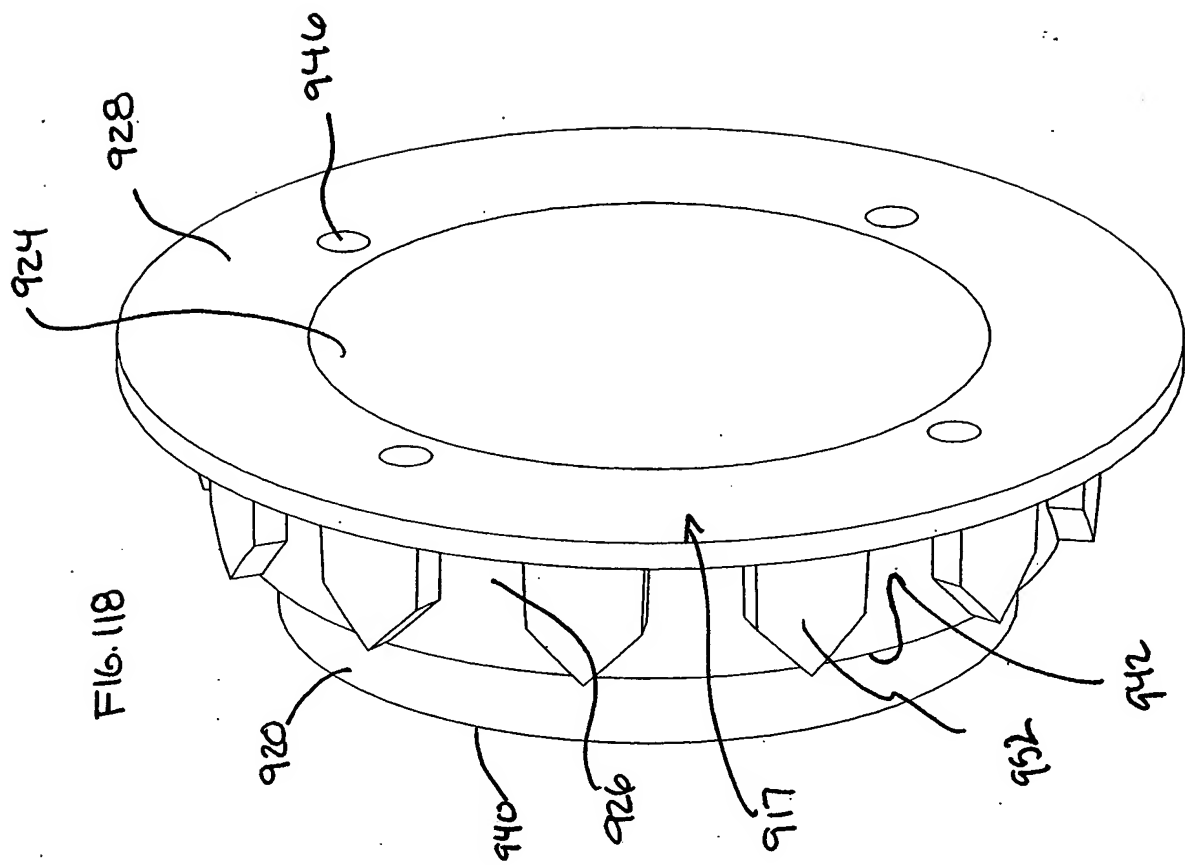
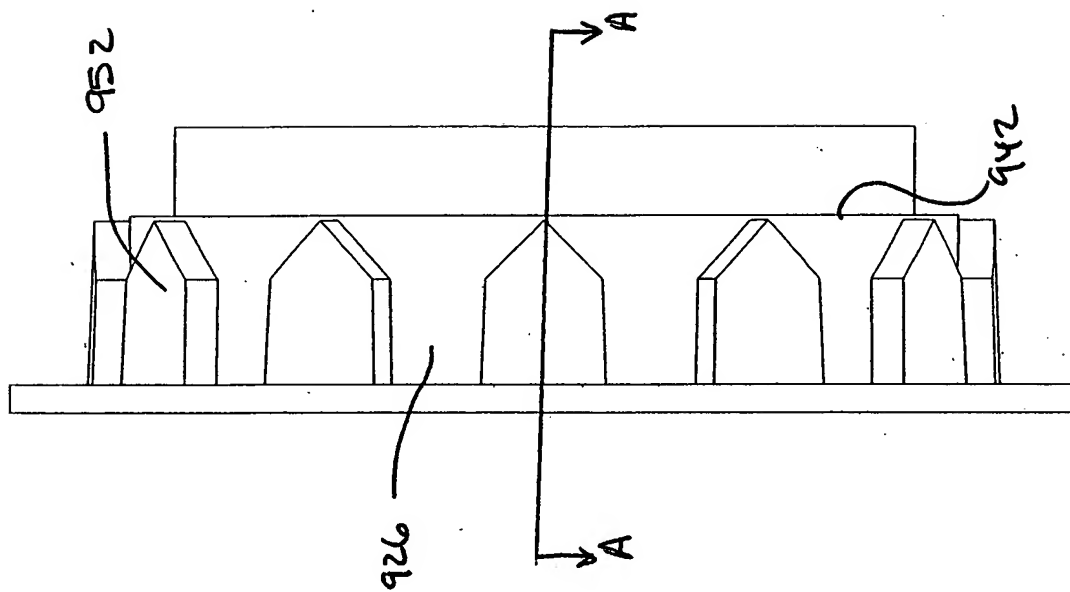


FIG. 118

FIG. 119



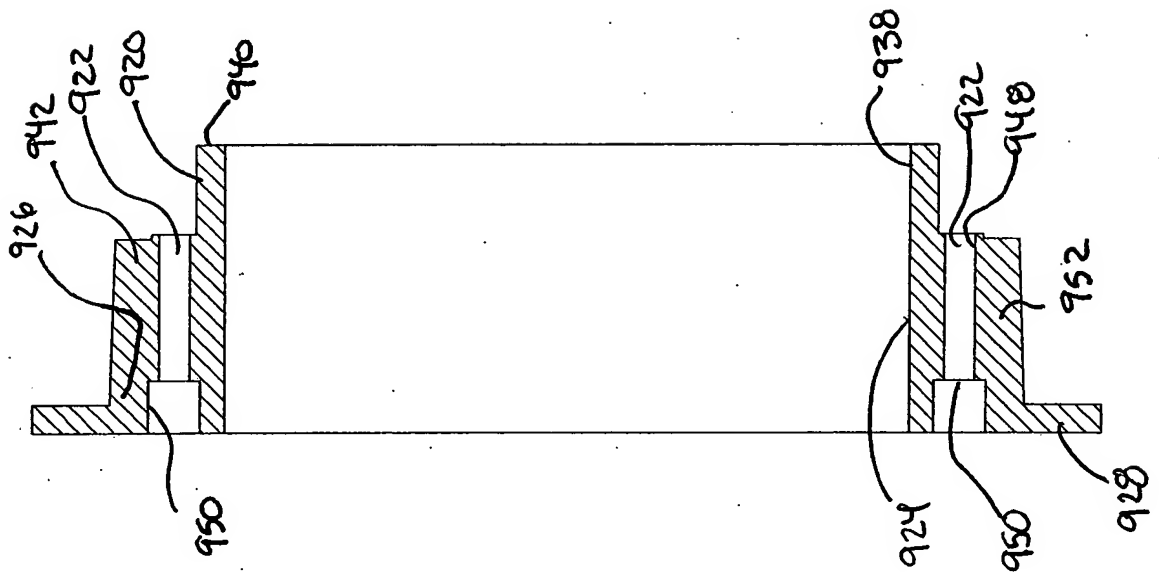
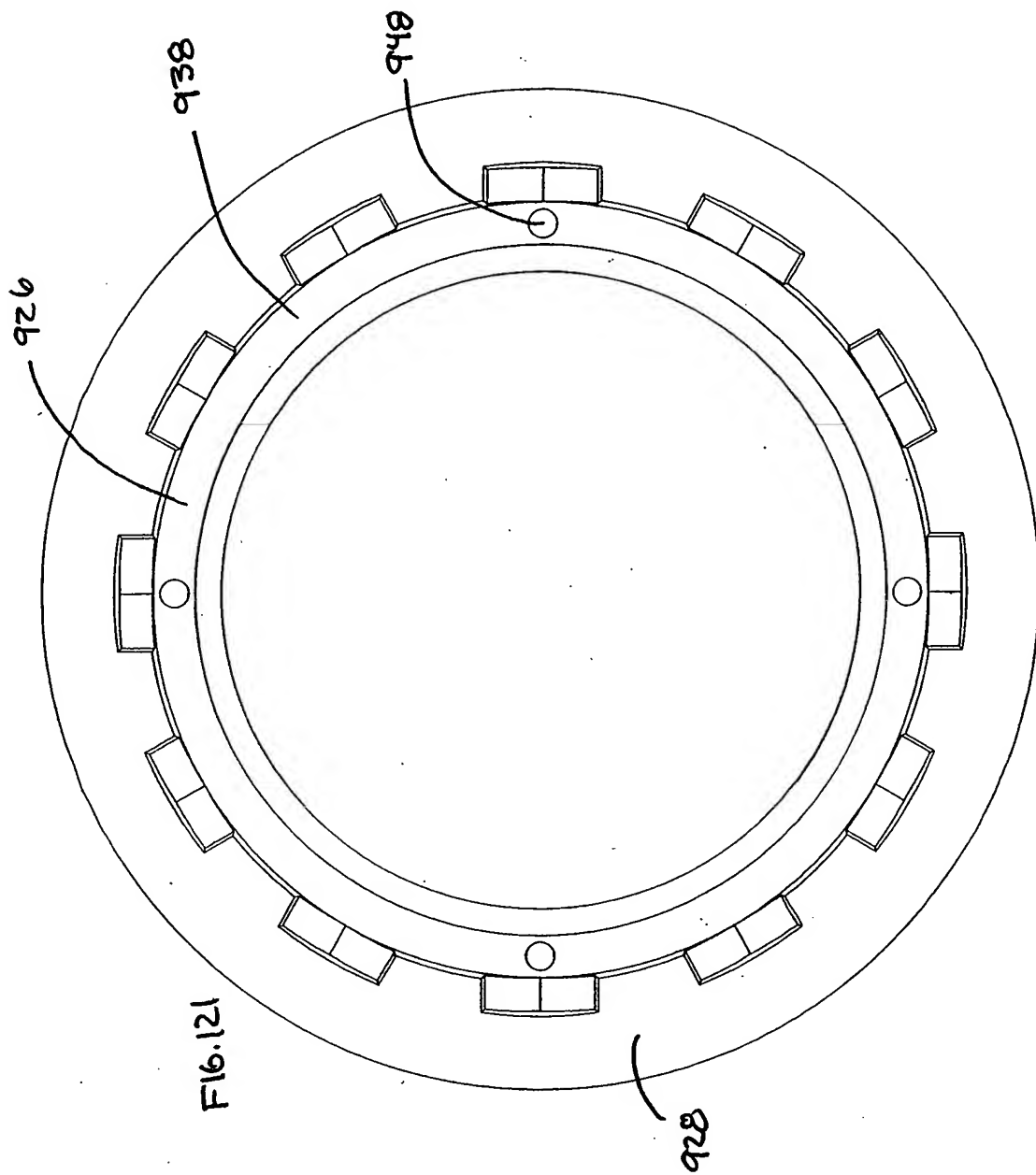


FIG. 120



F16.121

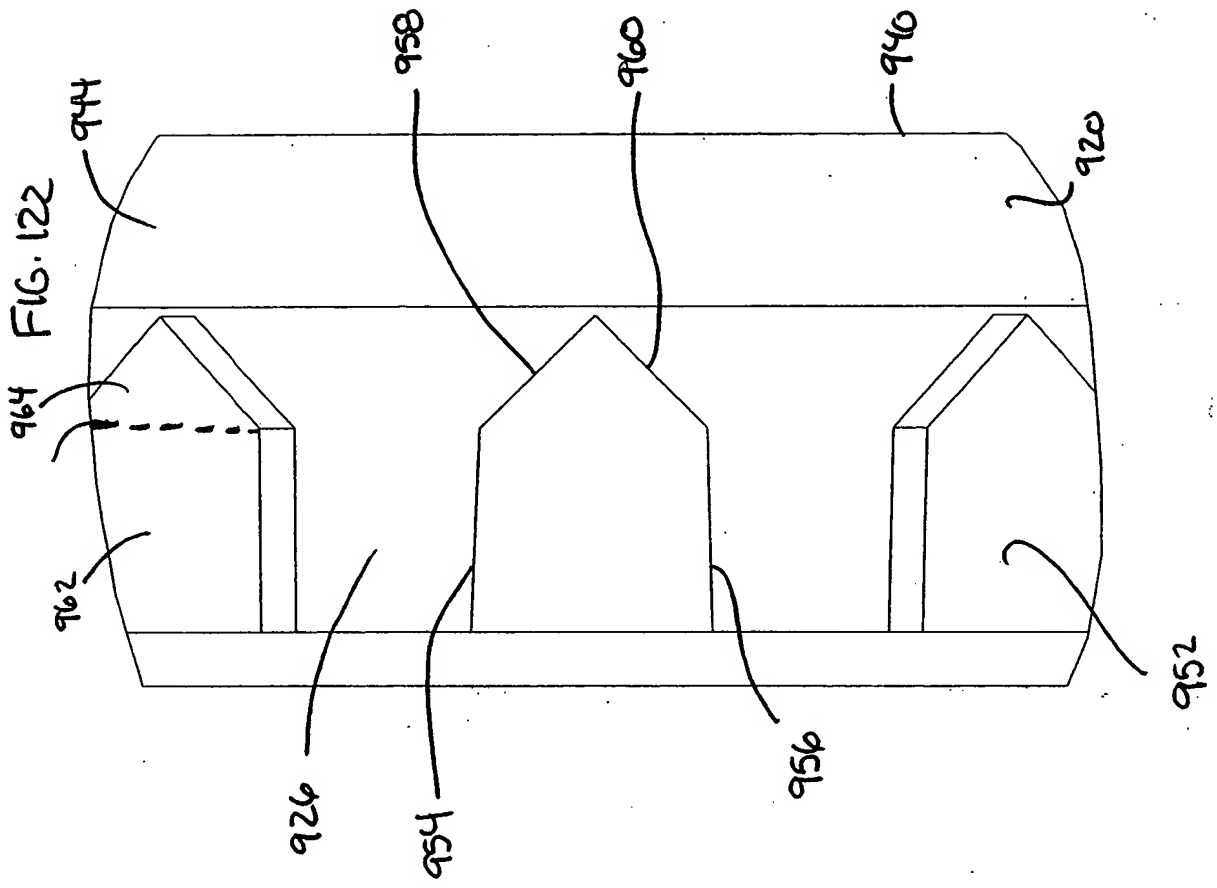
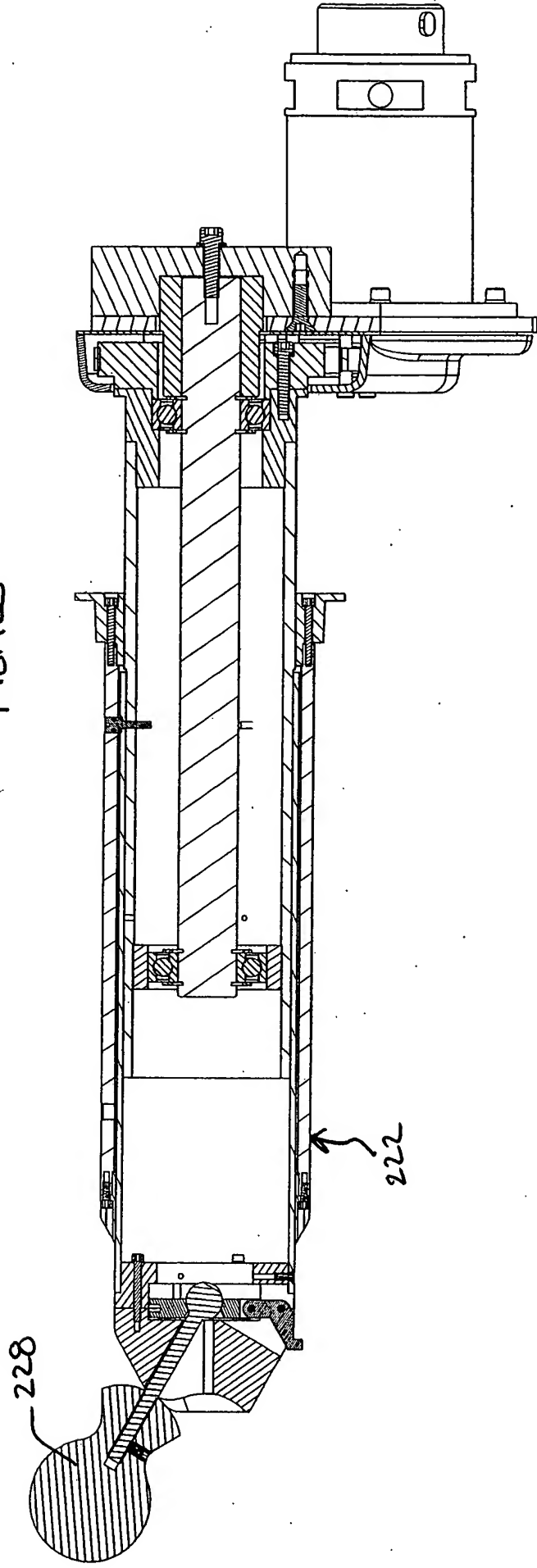


FIG. 123



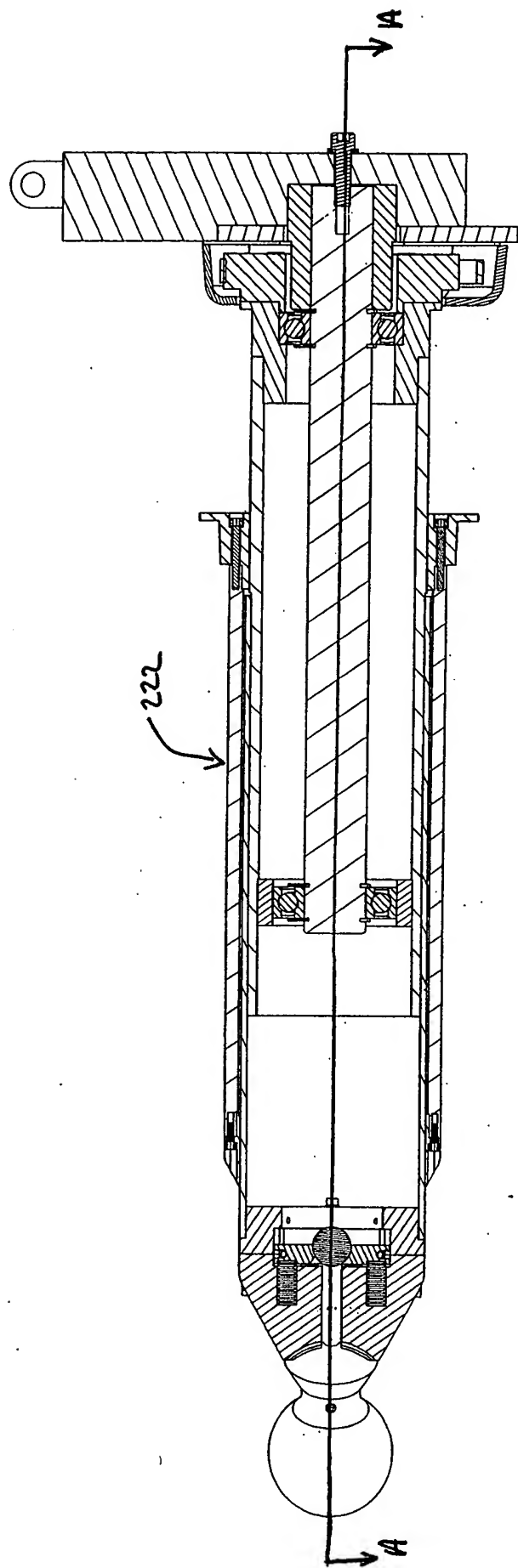
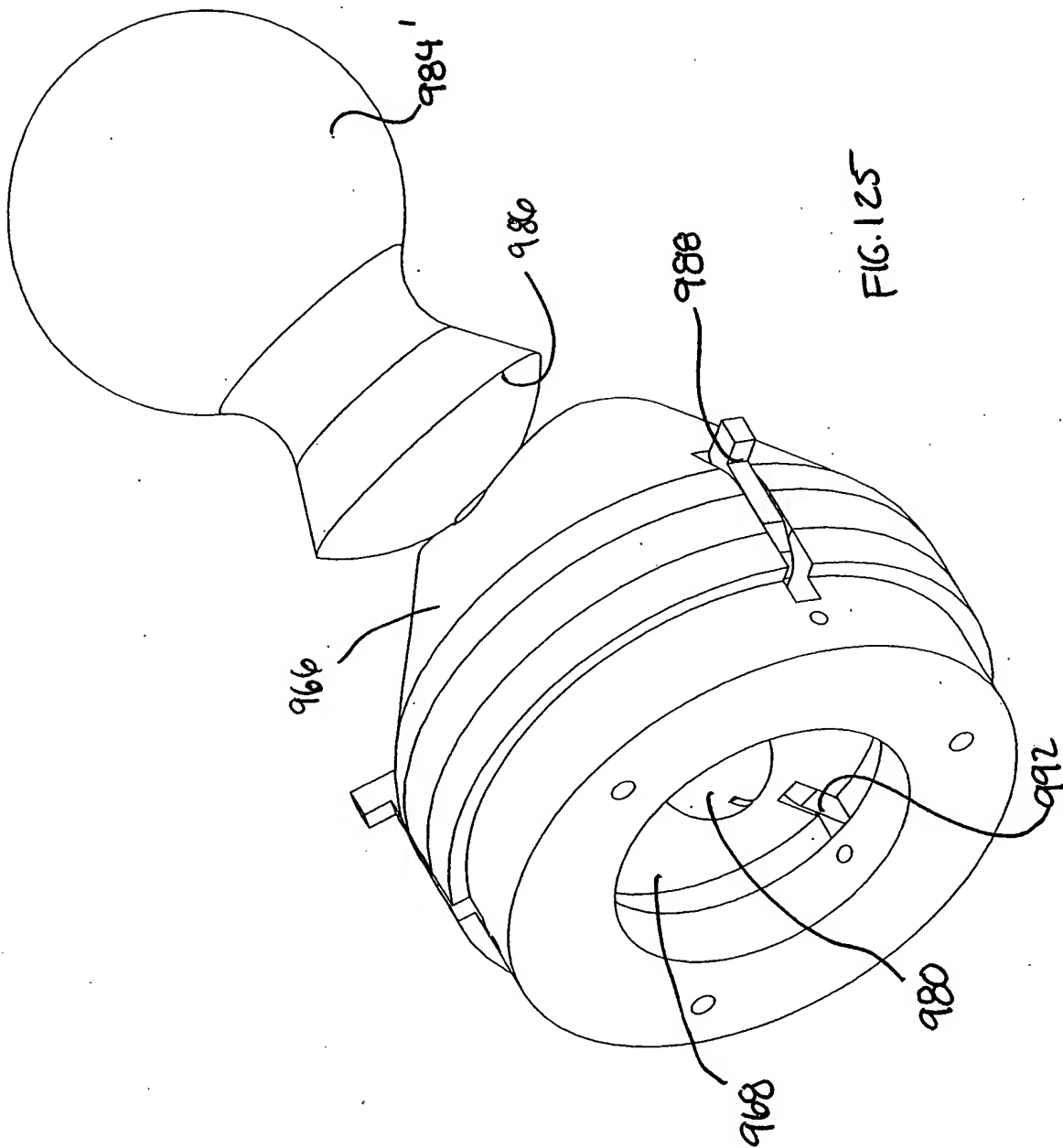


FIG. 124



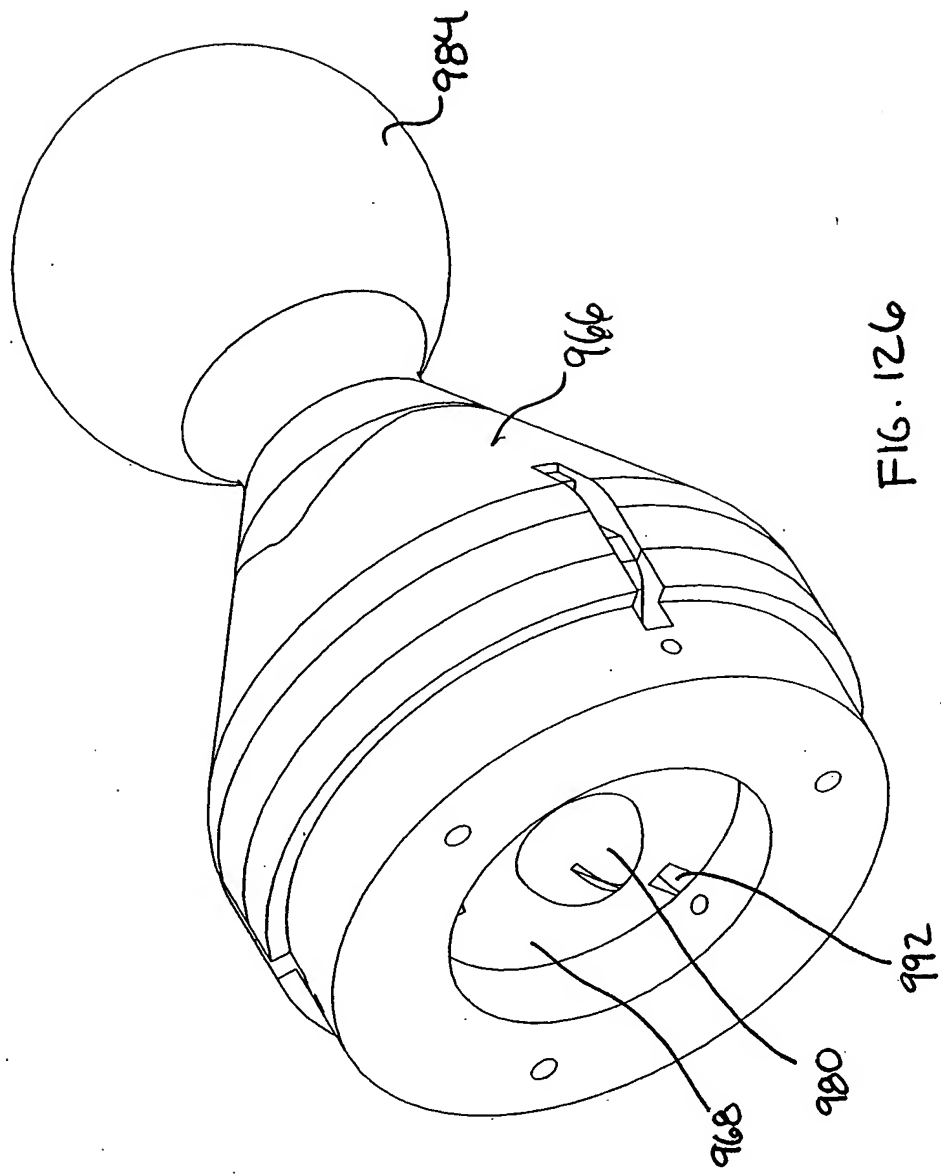


FIG. 126

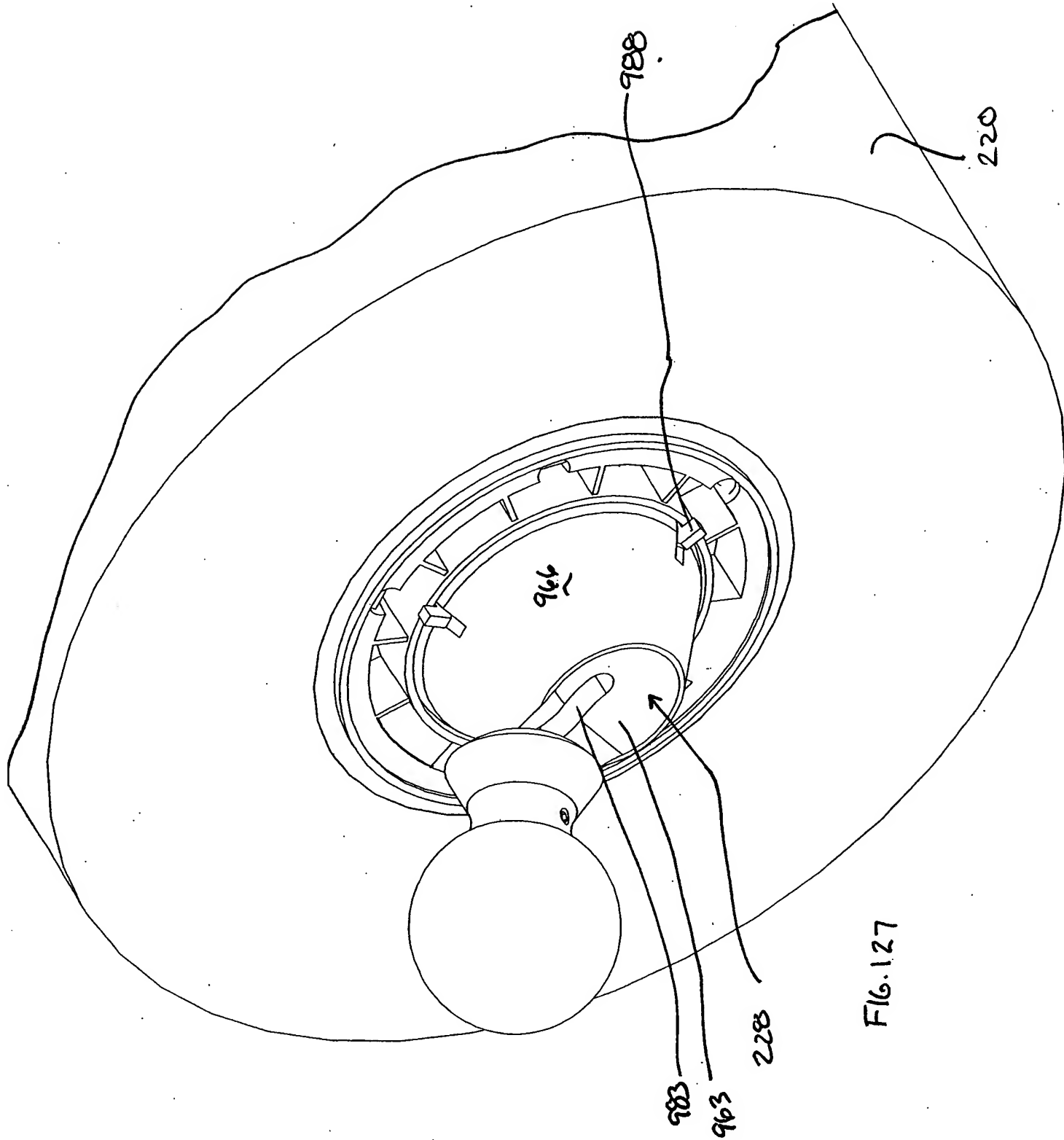


FIG. 127

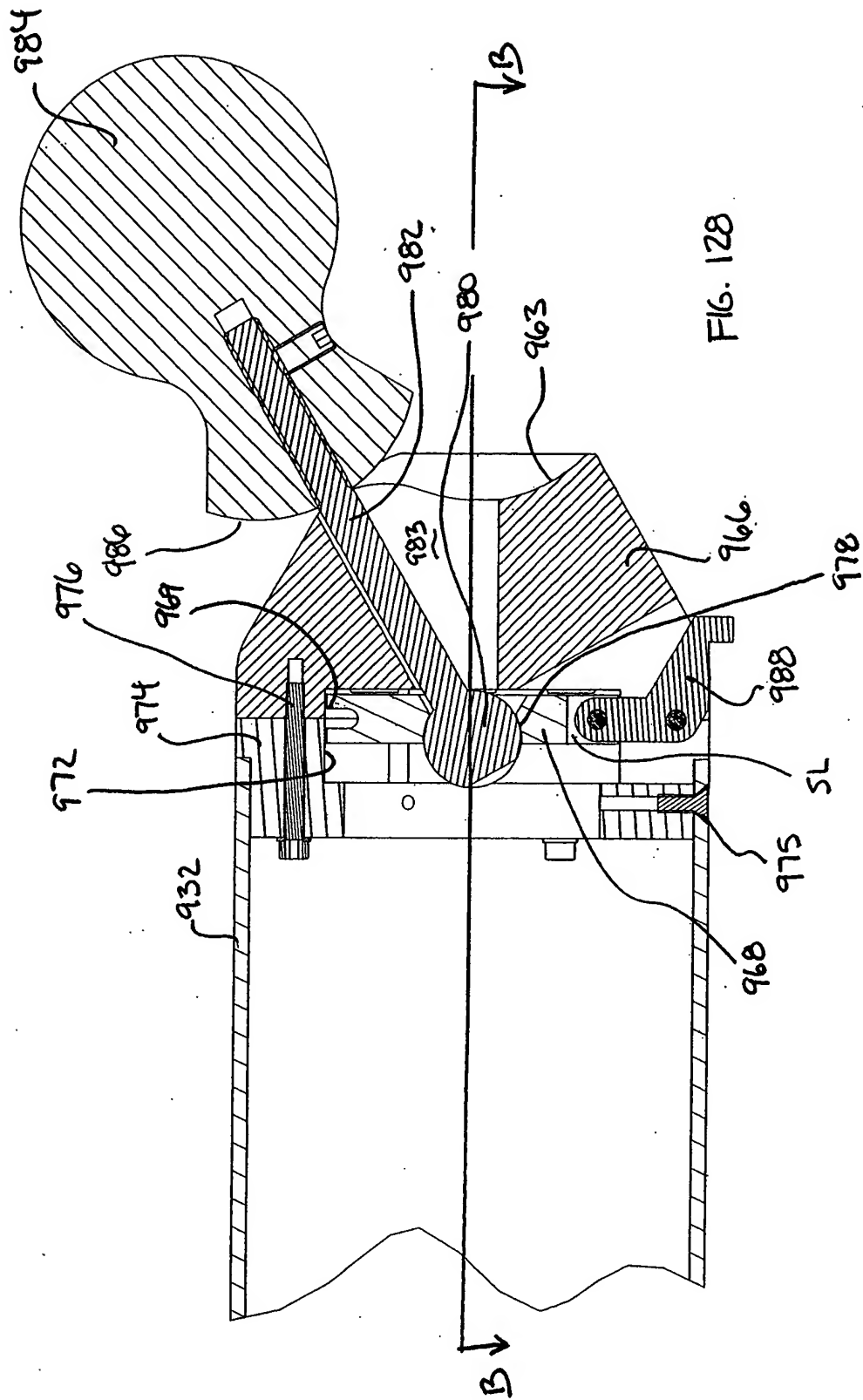
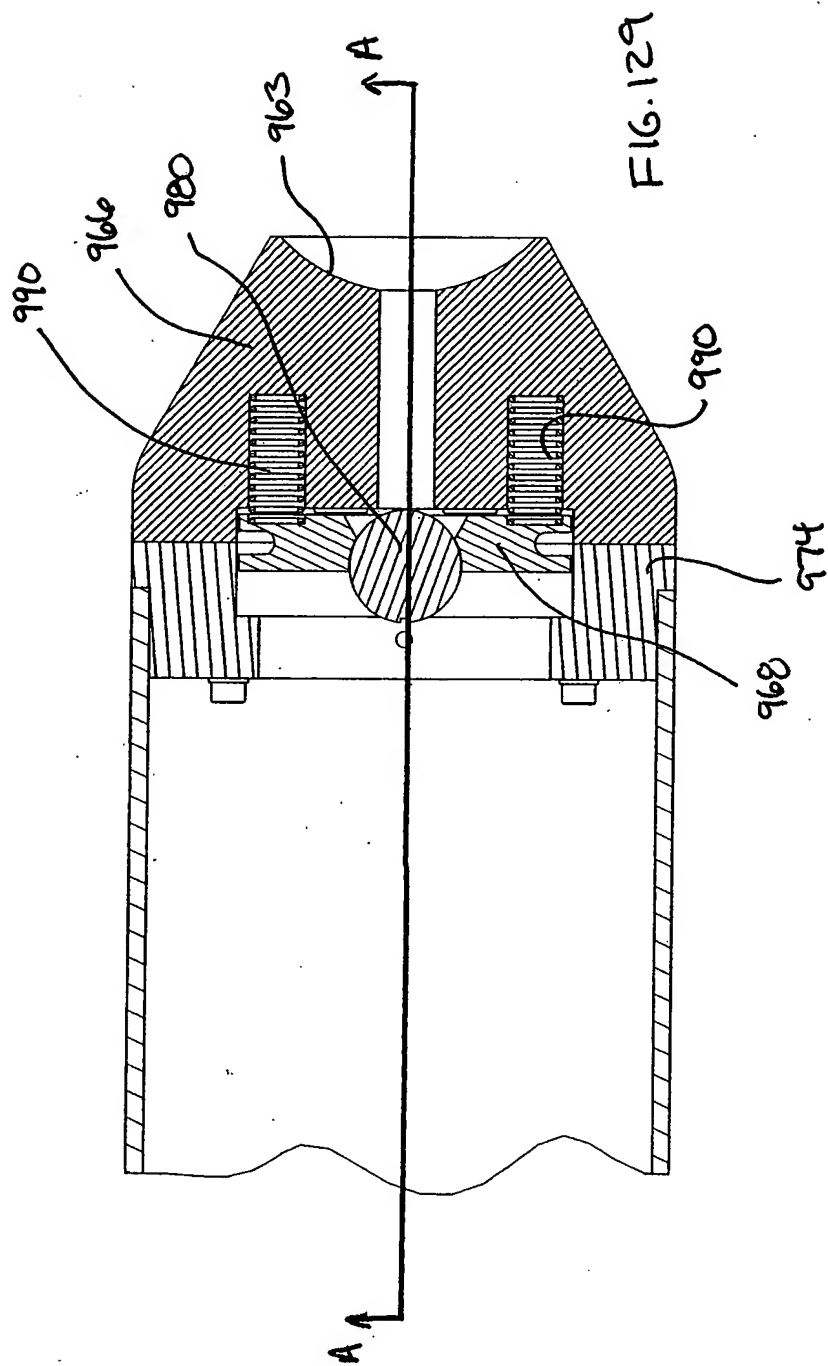


FIG. 128



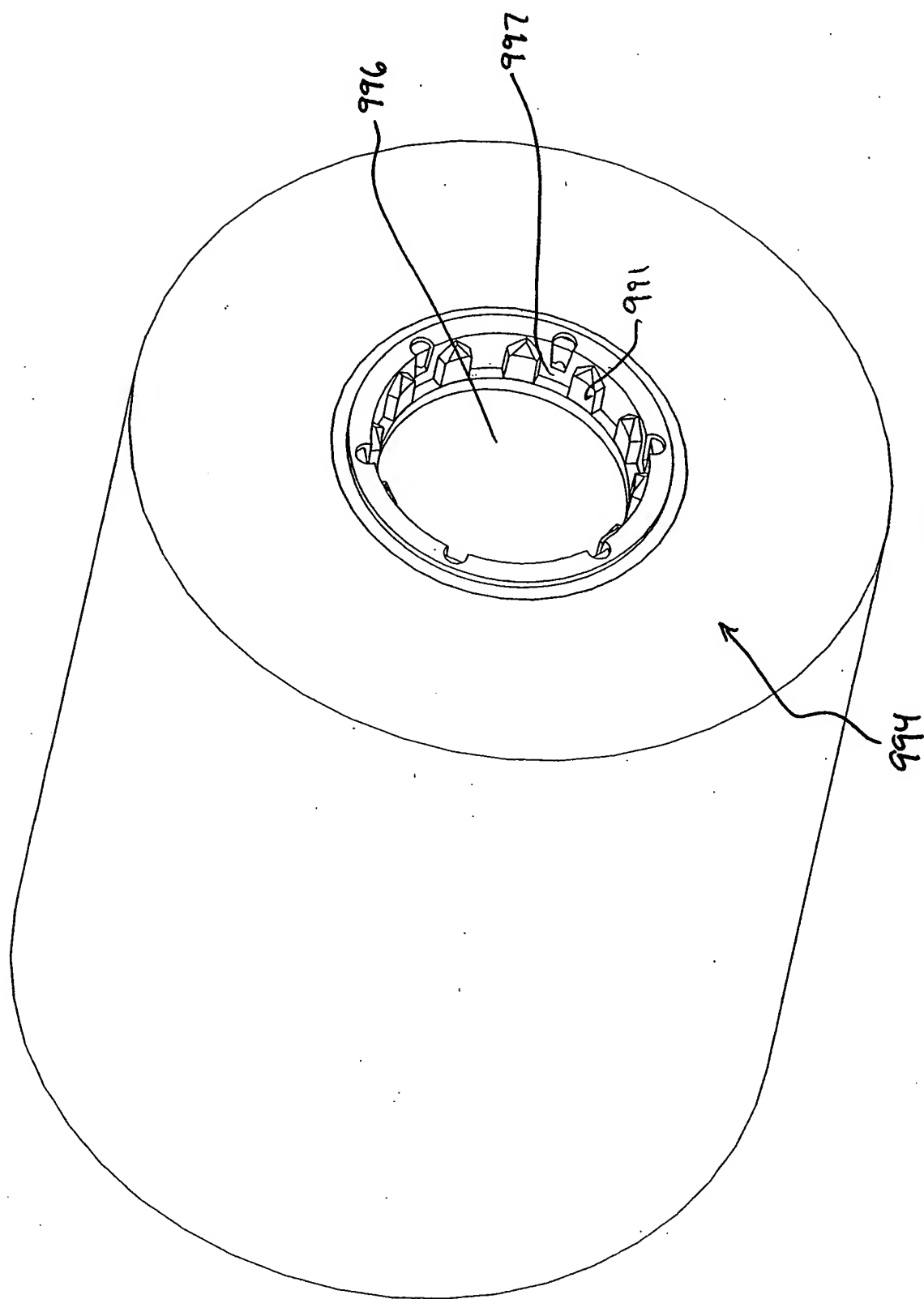


FIG. 130

FIG. 13

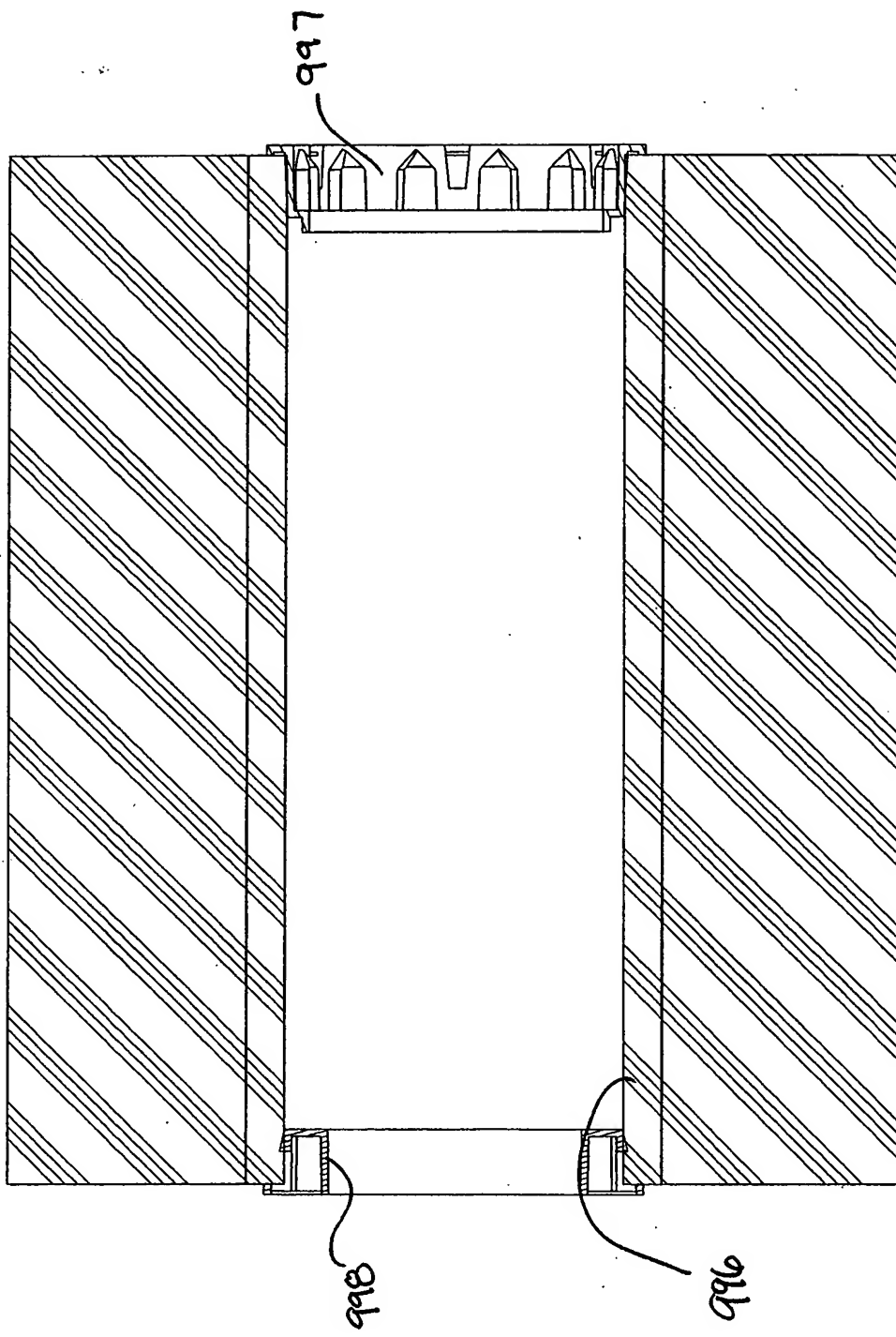
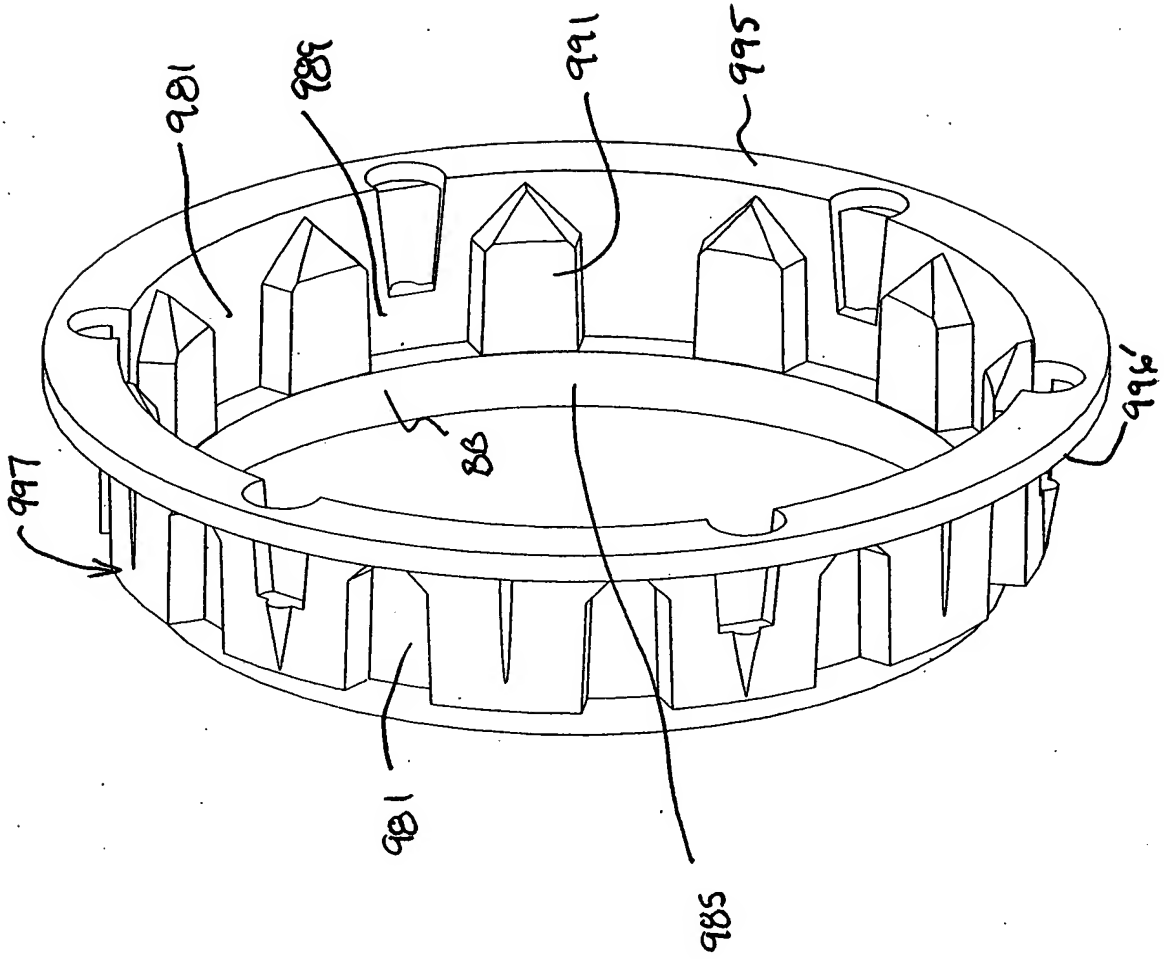


FIG. 132



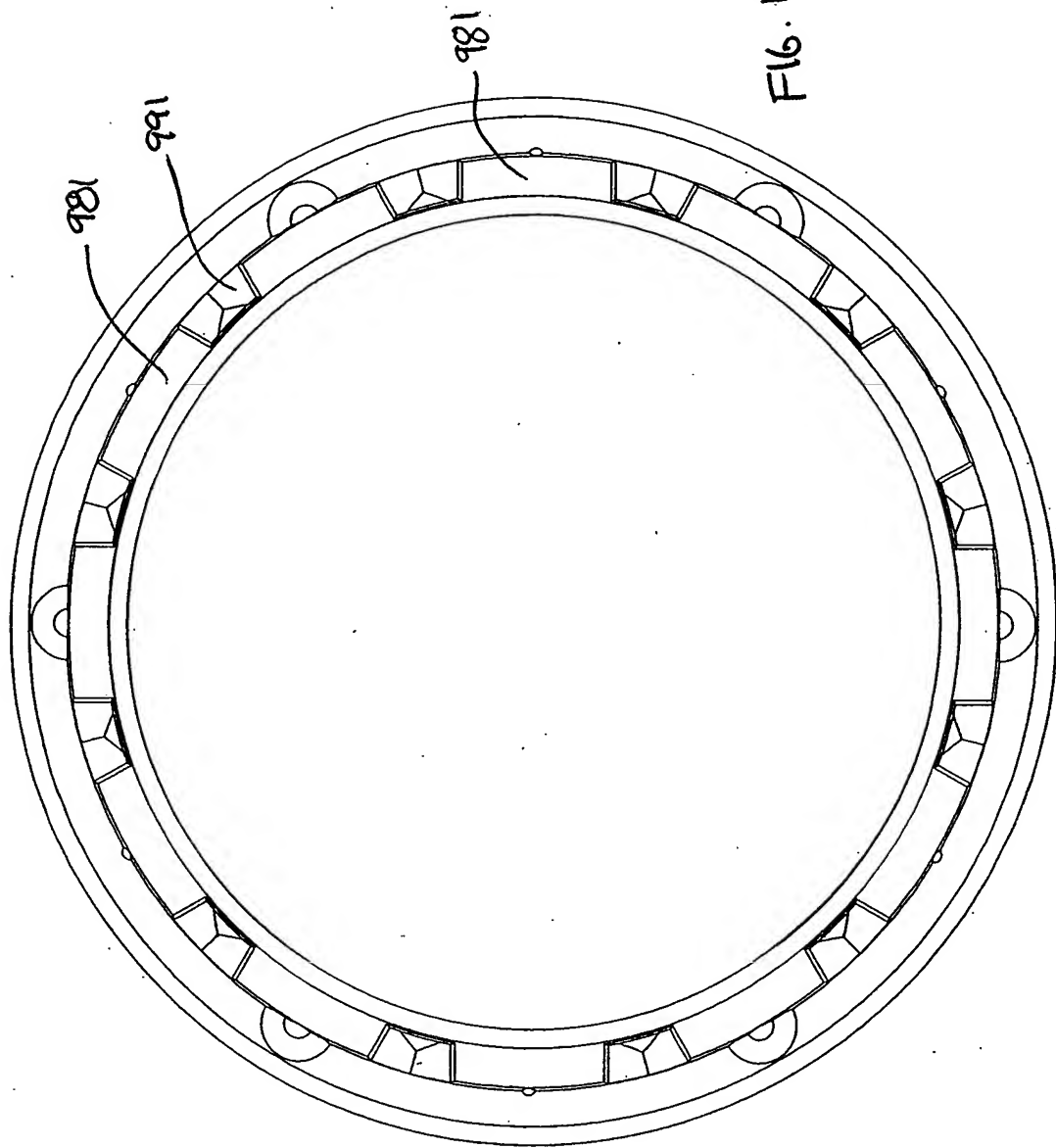
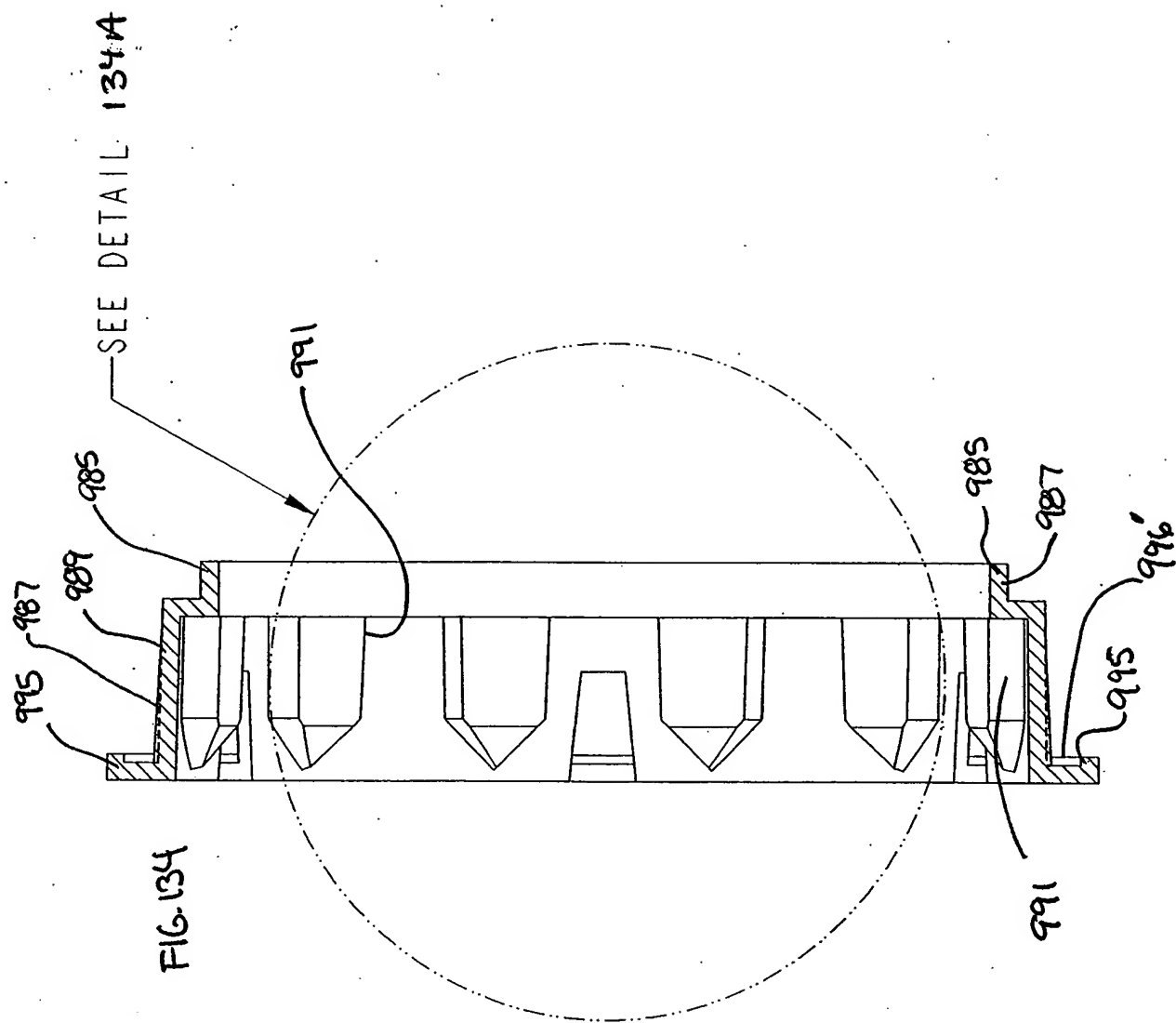


FIG. 133



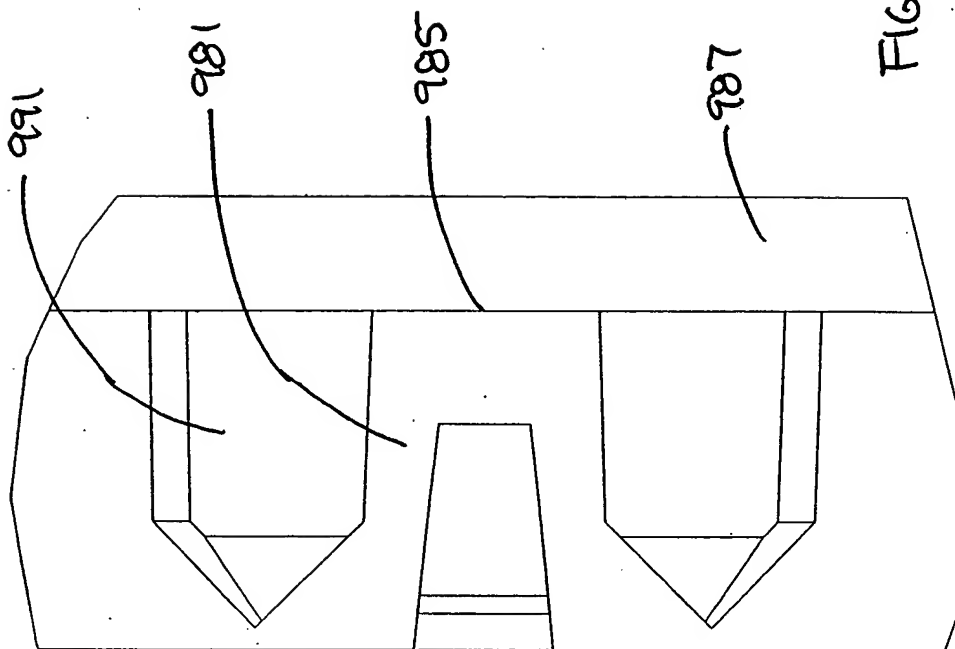
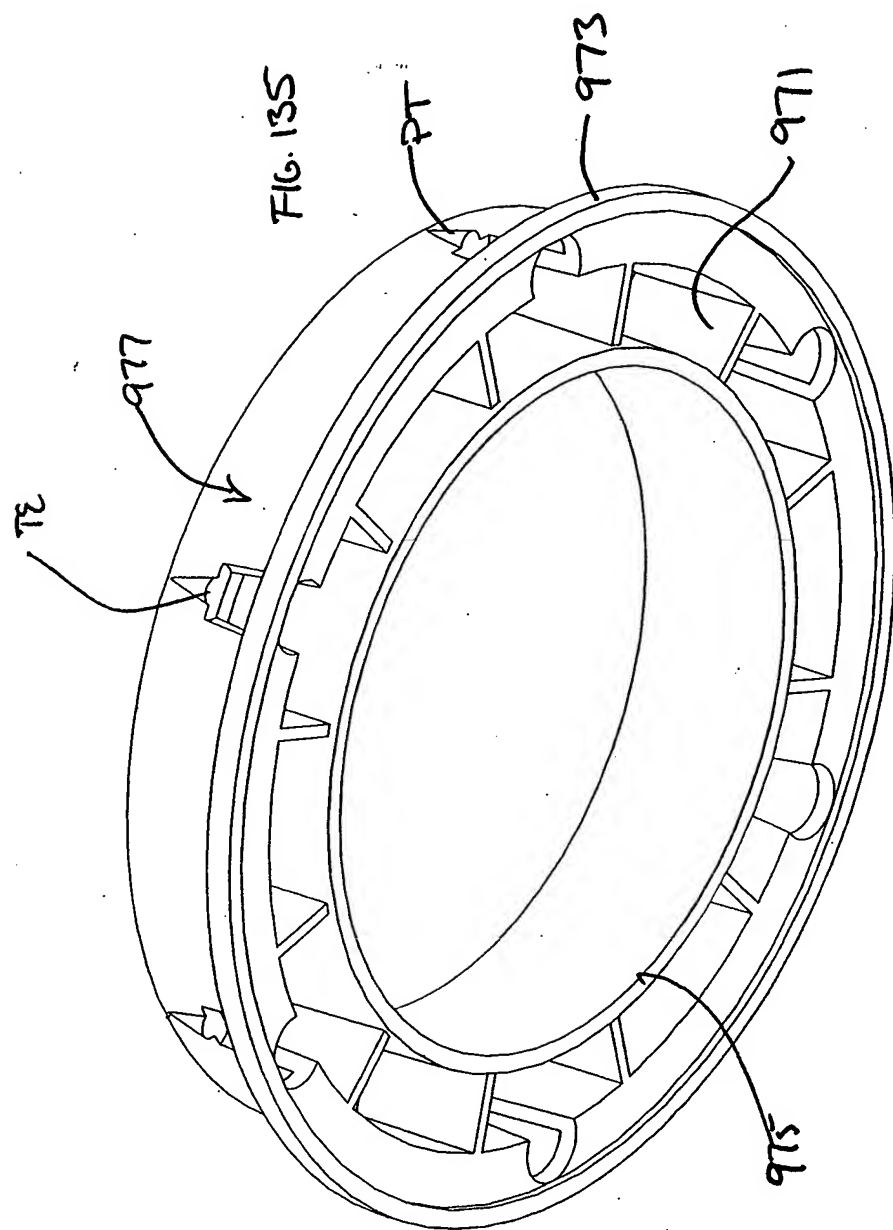


FIG. 134A



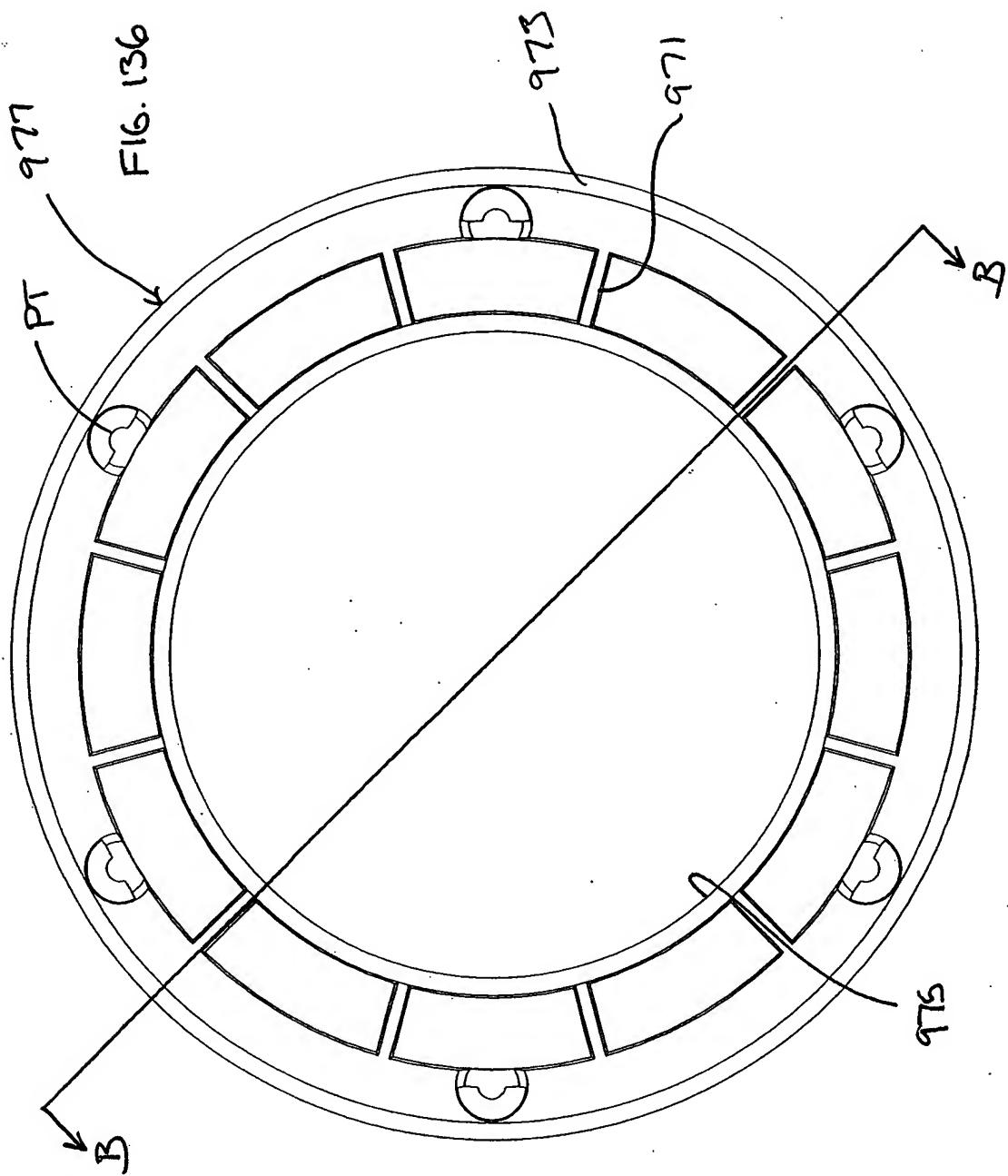
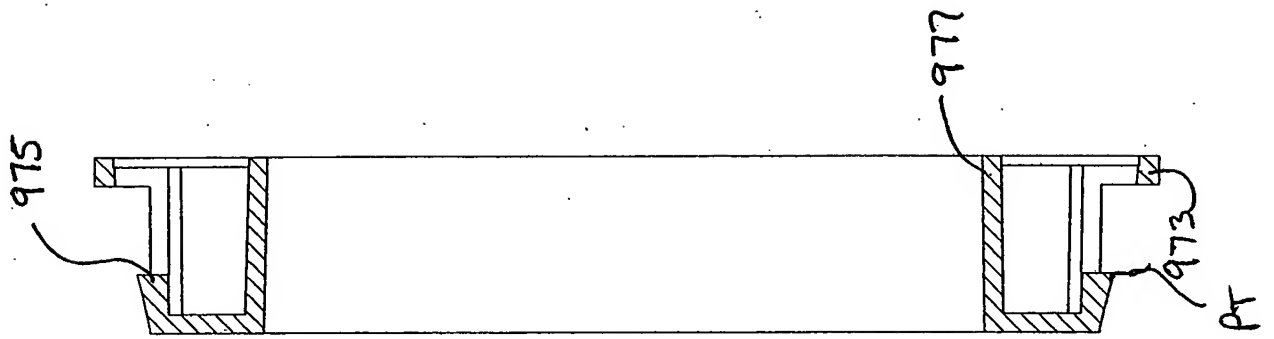


FIG. 137



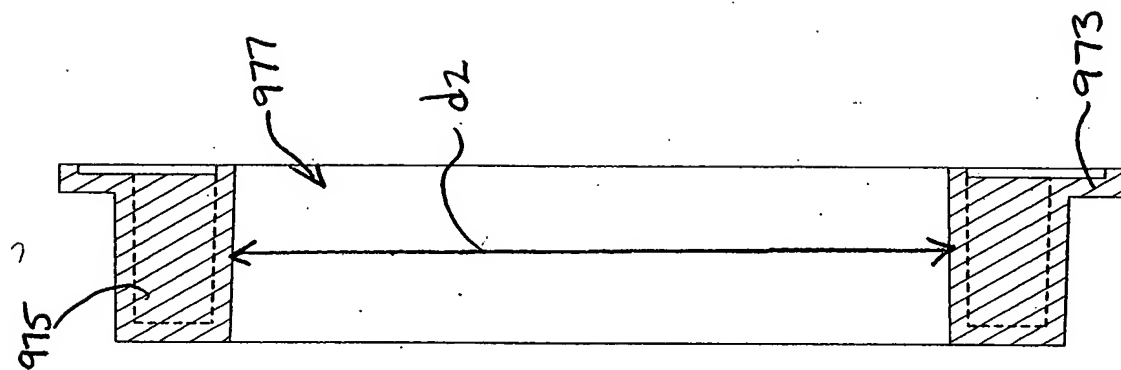
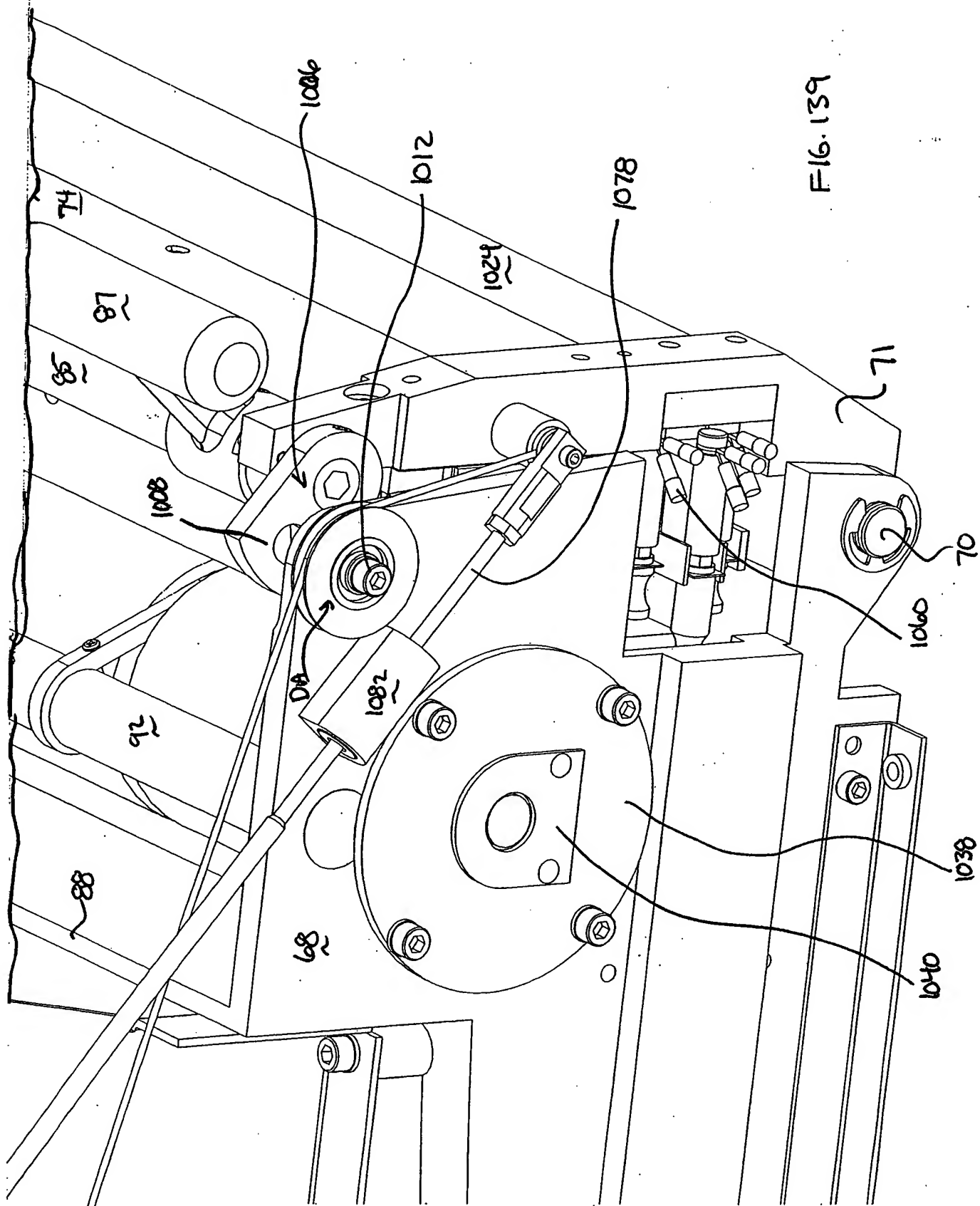
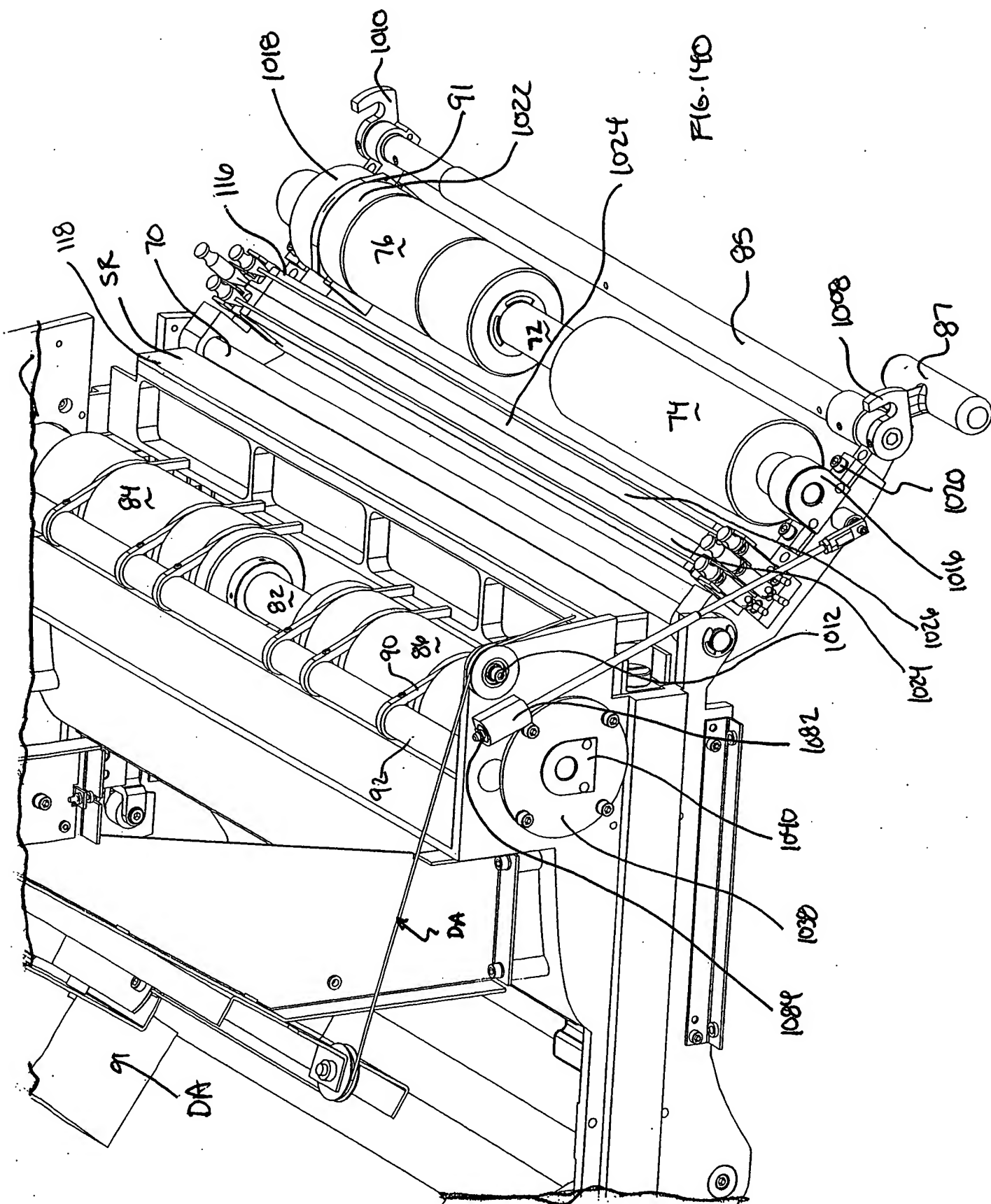


FIG. 138



F-16.139



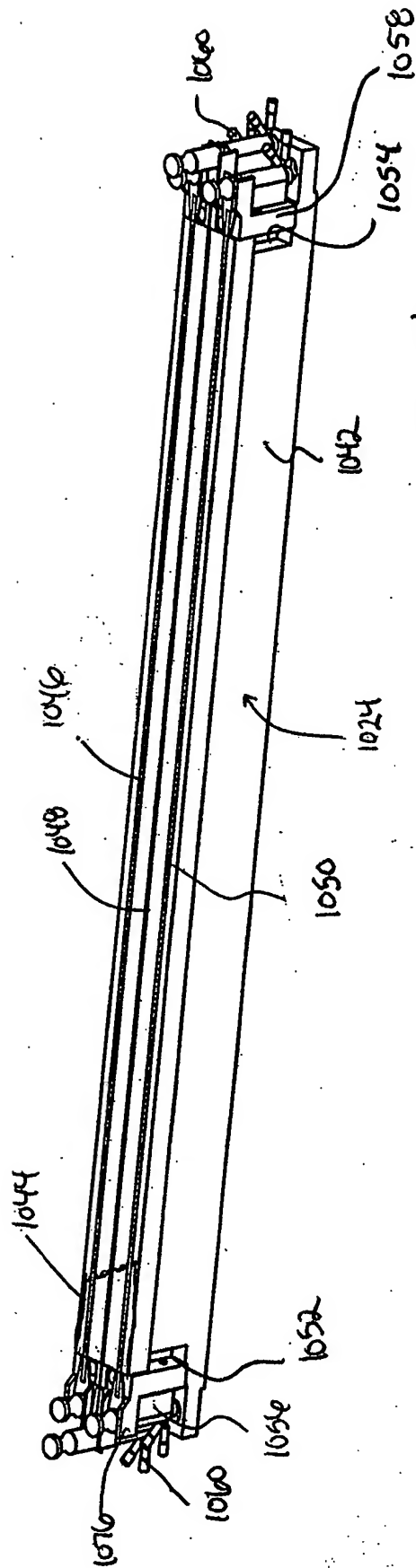


FIG. 141

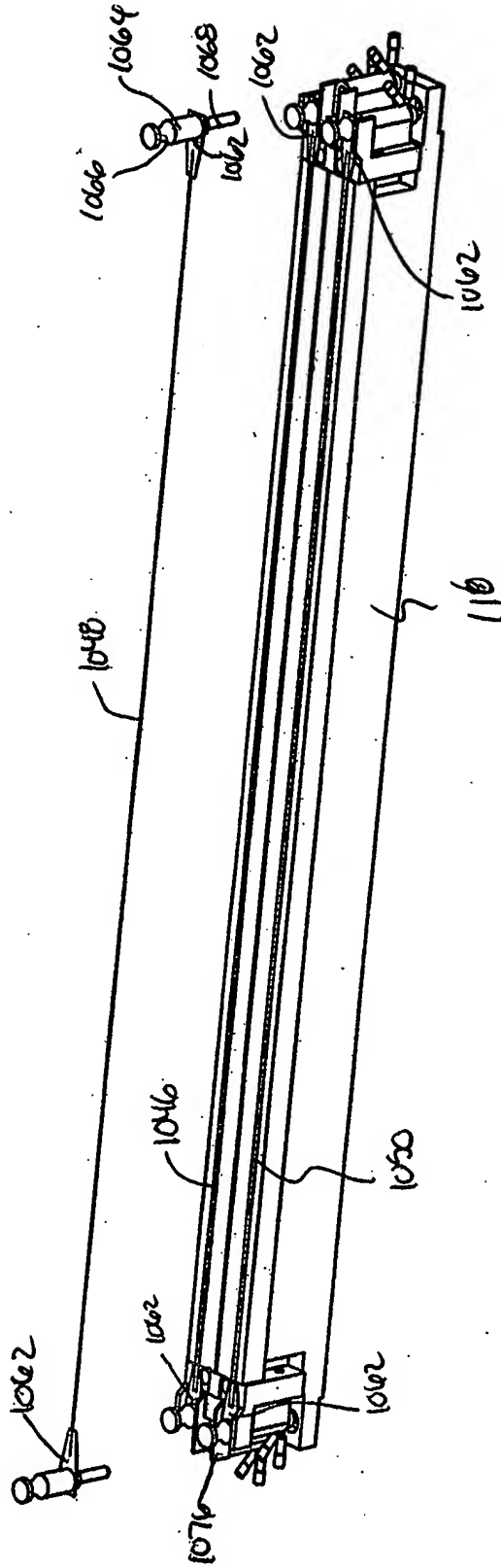
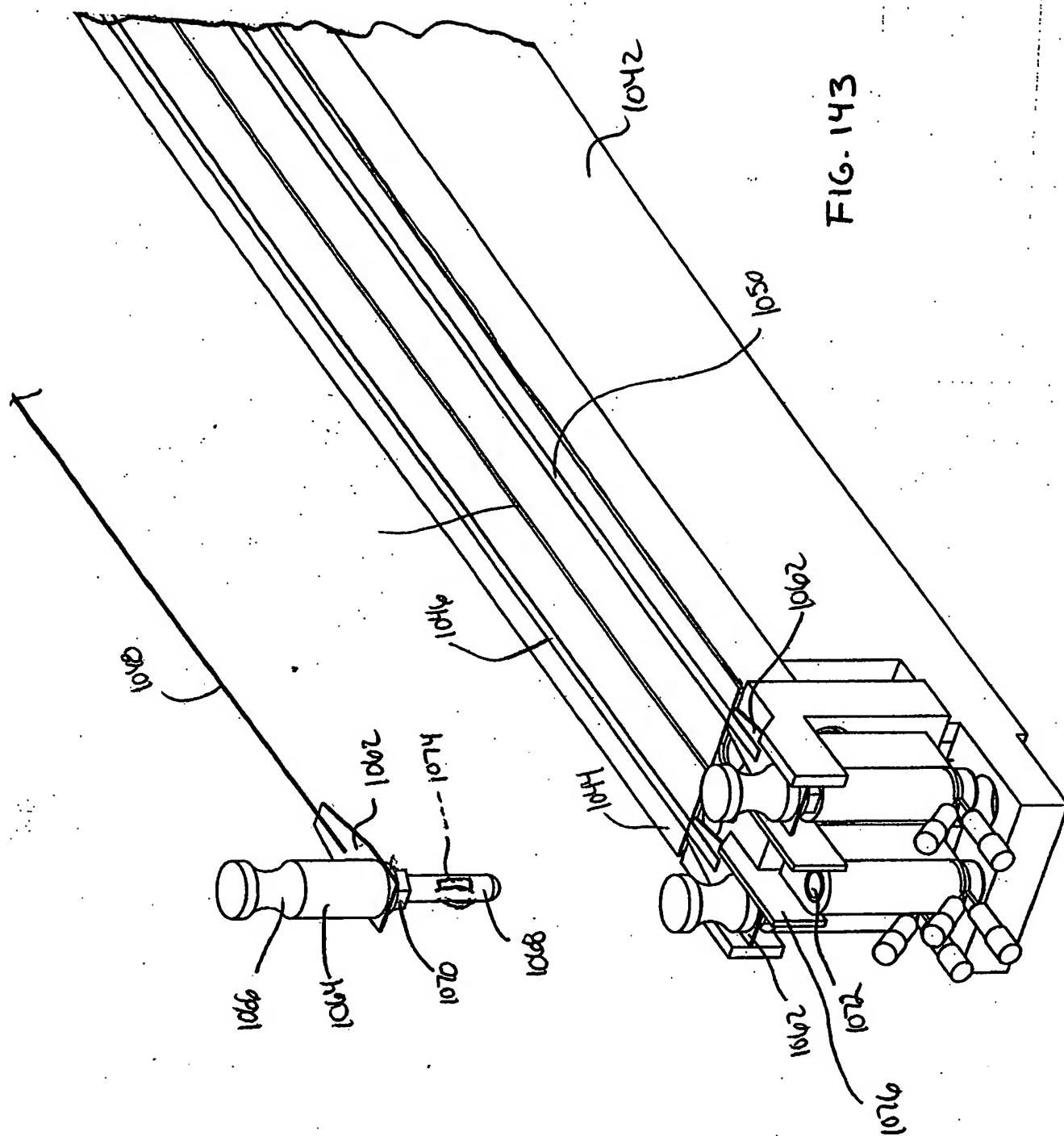


FIG 142



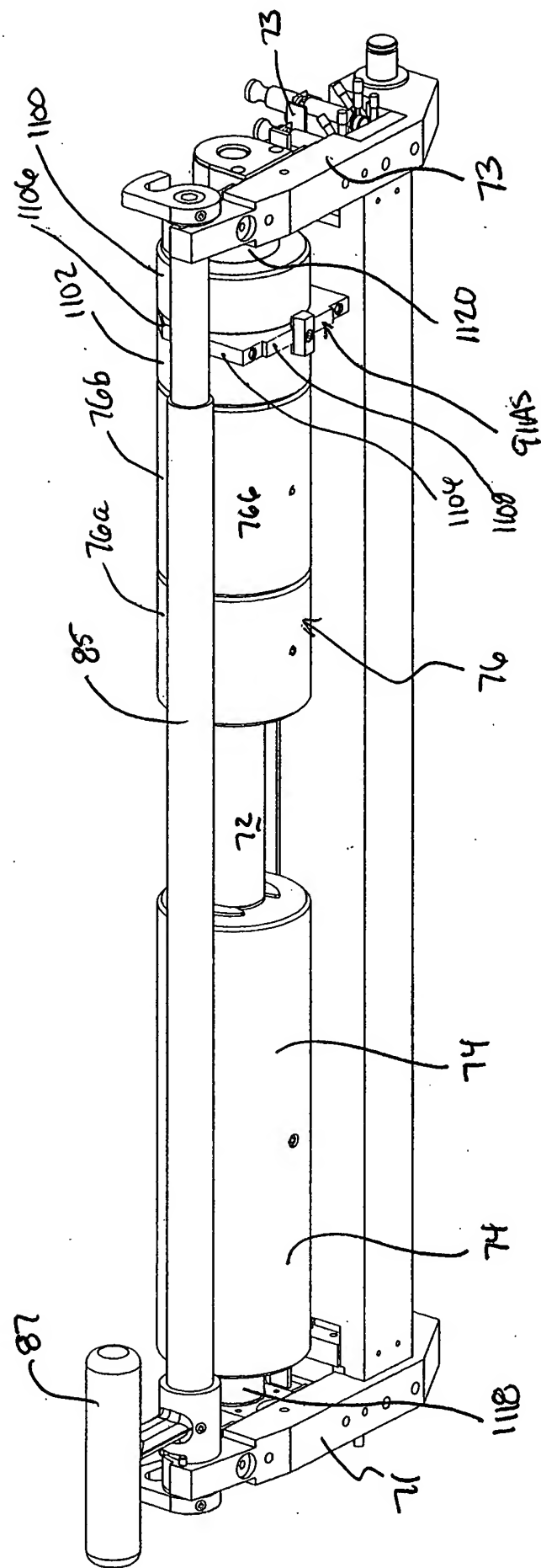
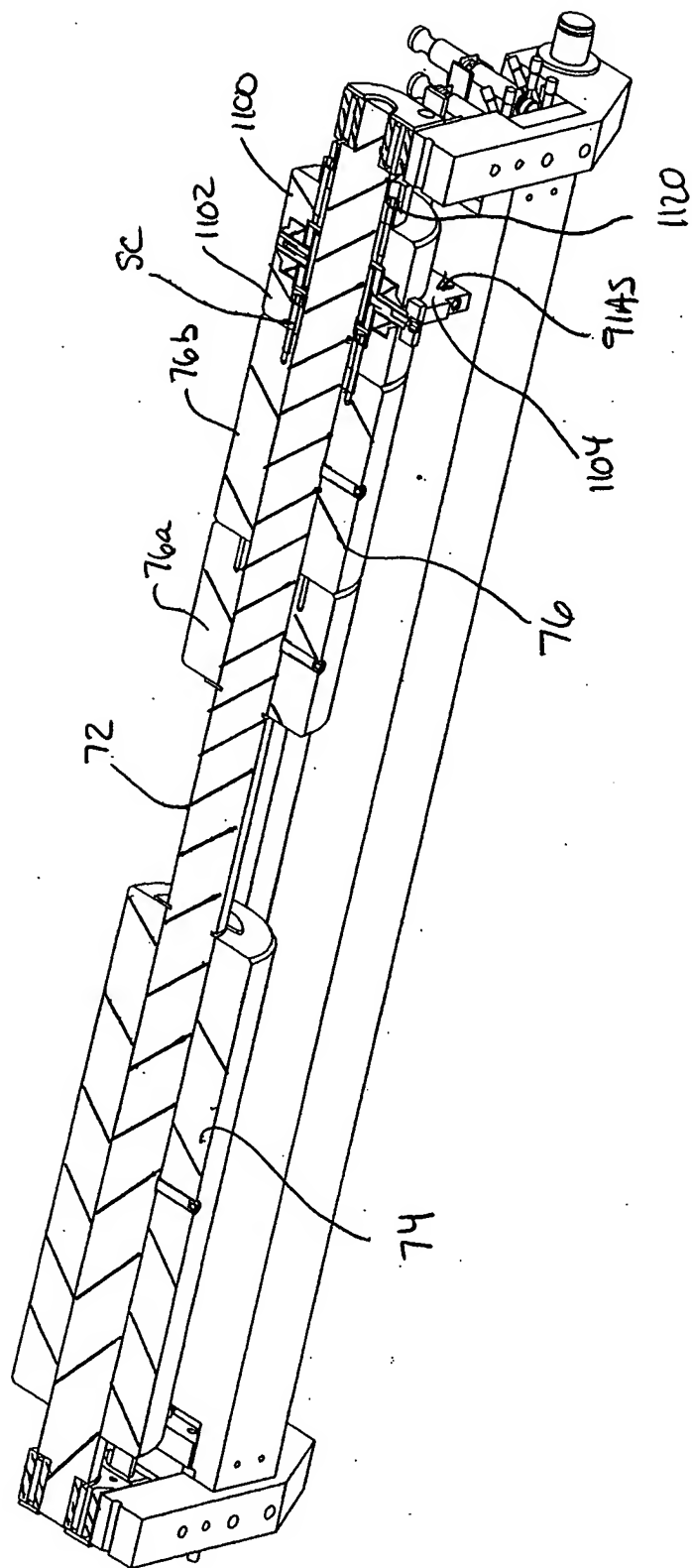


FIG. 144



FILE 145

FIG. 14C

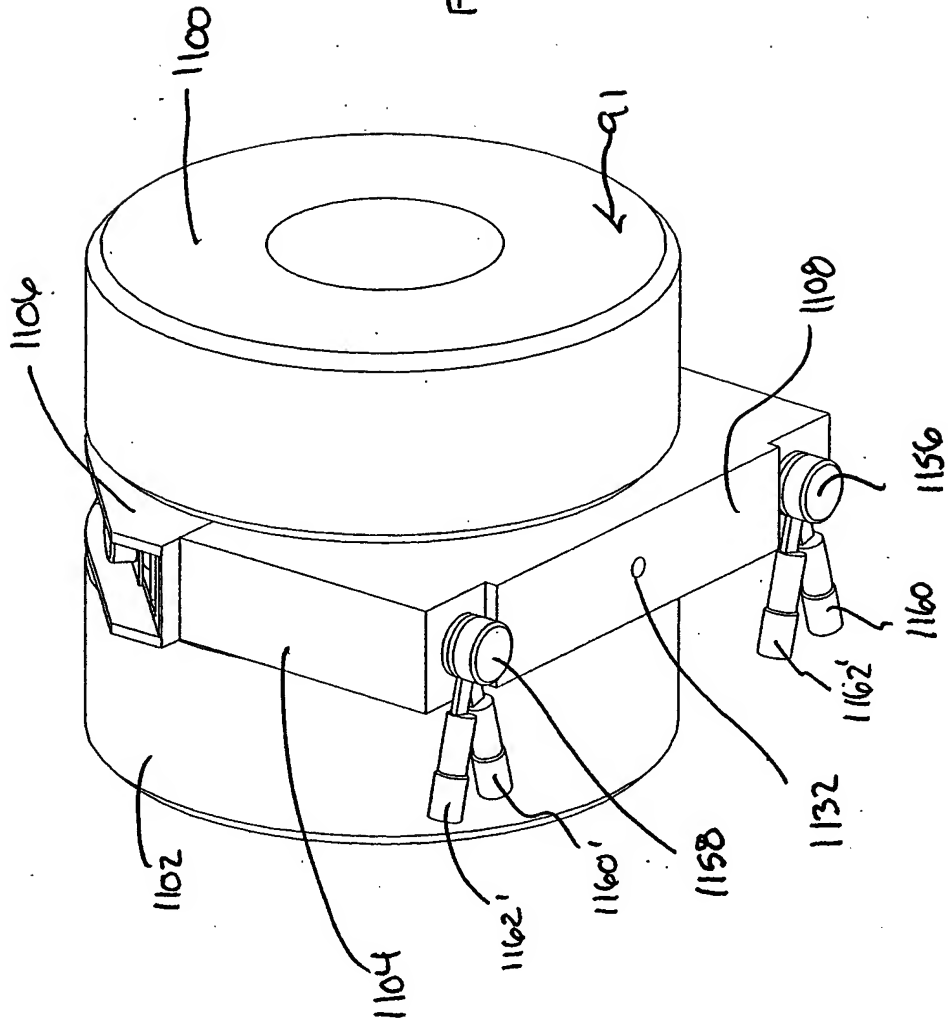


FIG. 14C

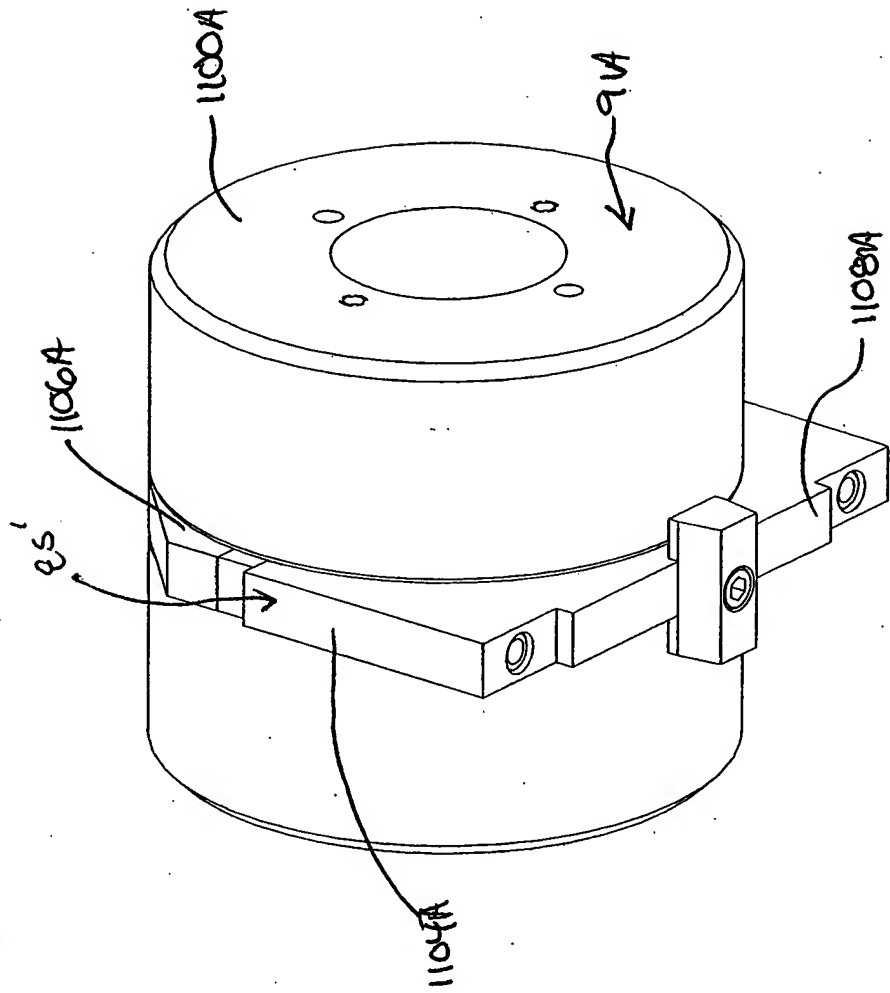


FIG. 147

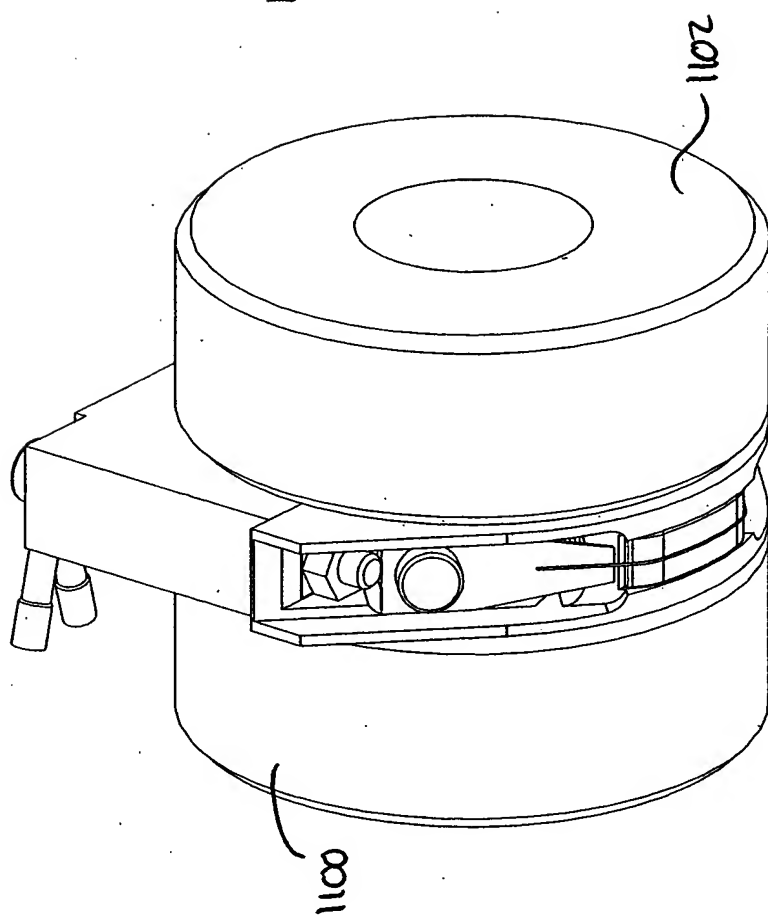
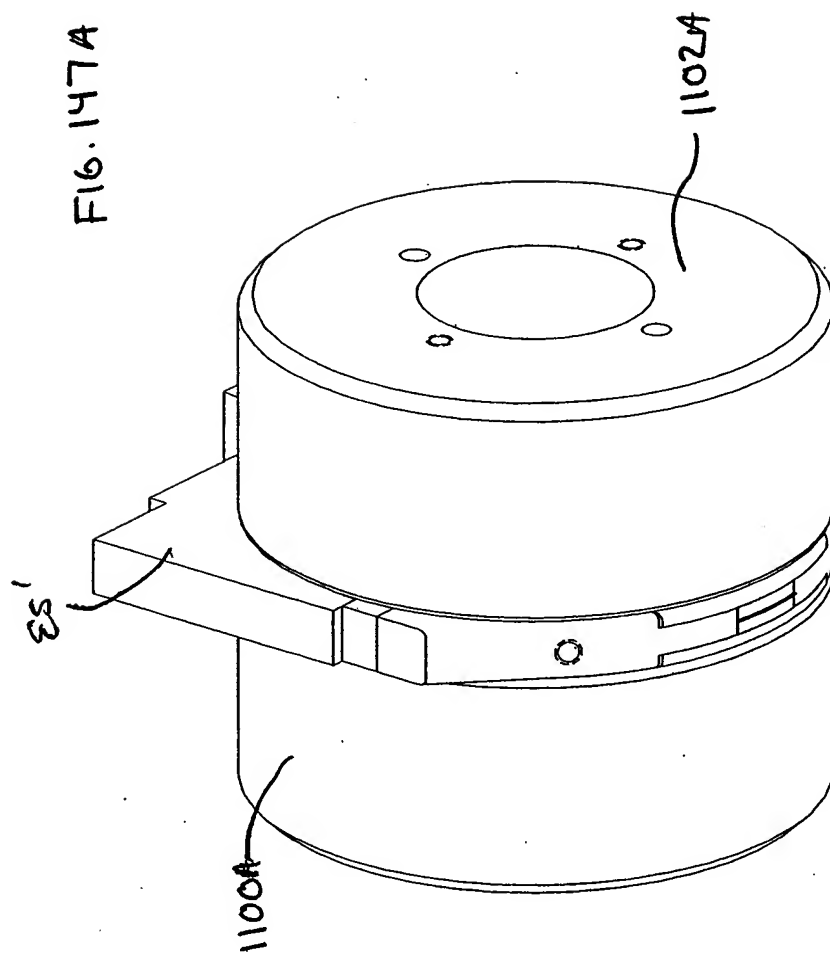


FIG. 147A



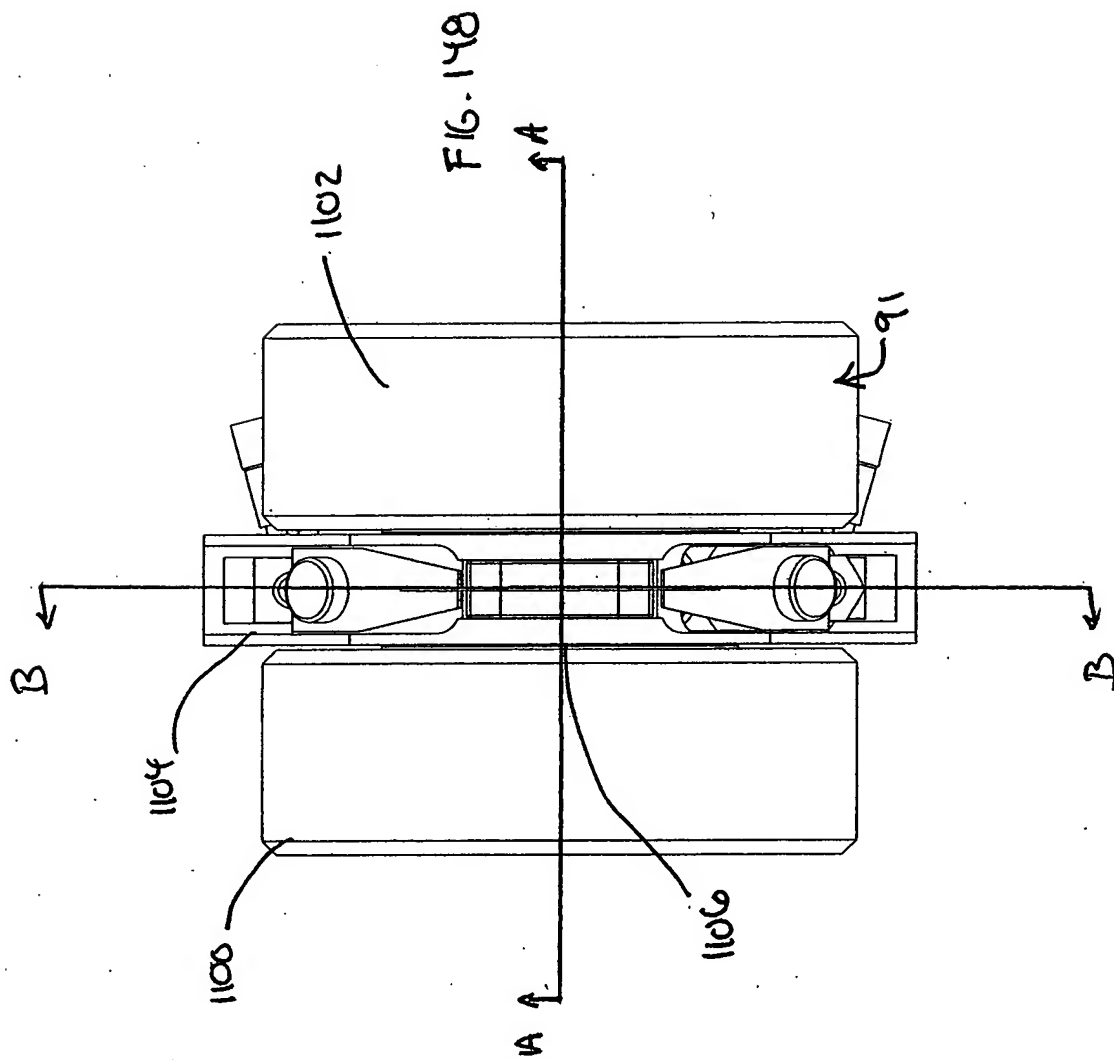
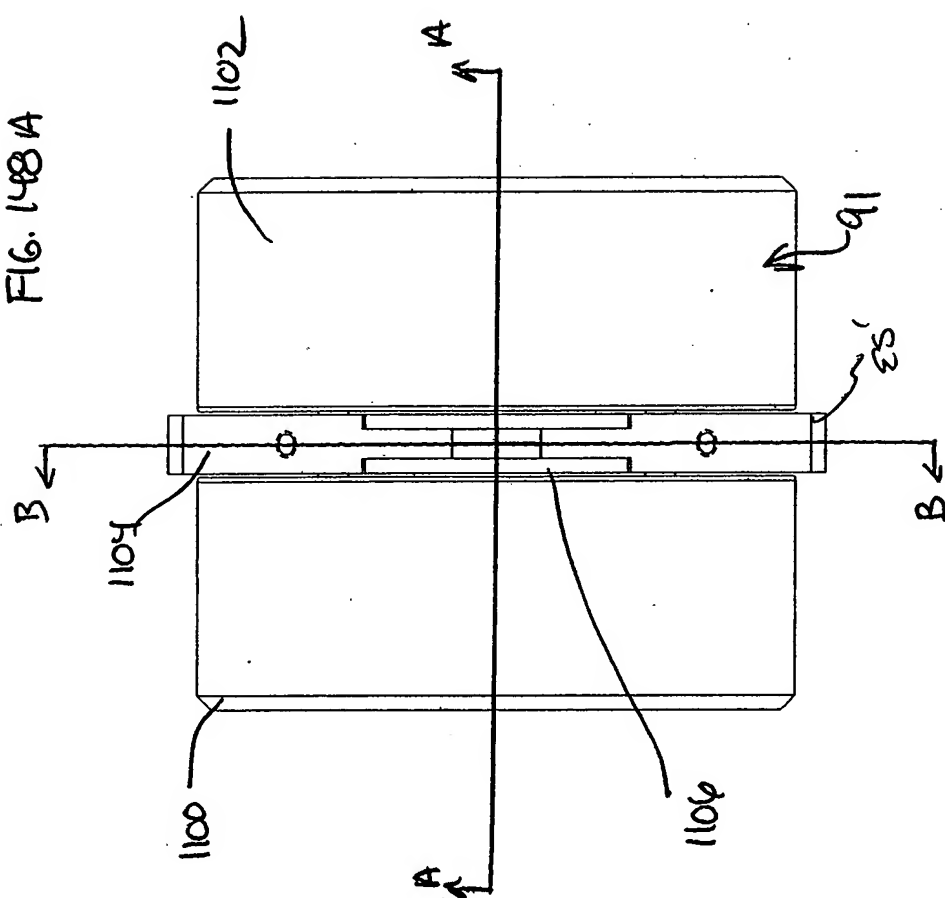
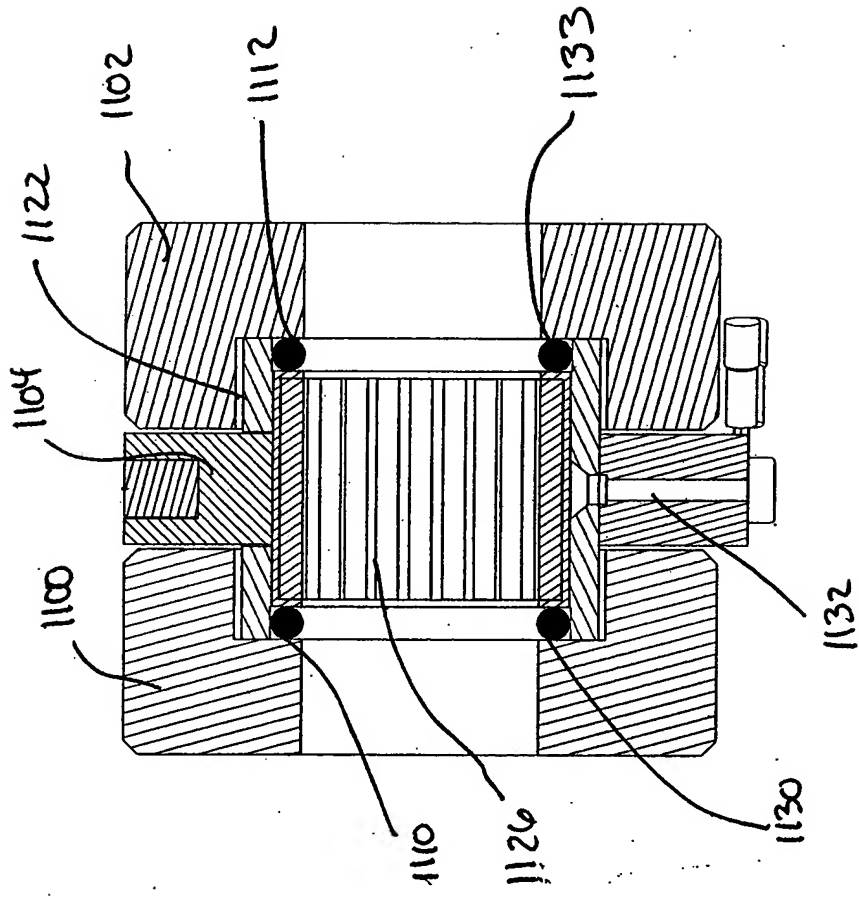


FIG. 148A





F16.149

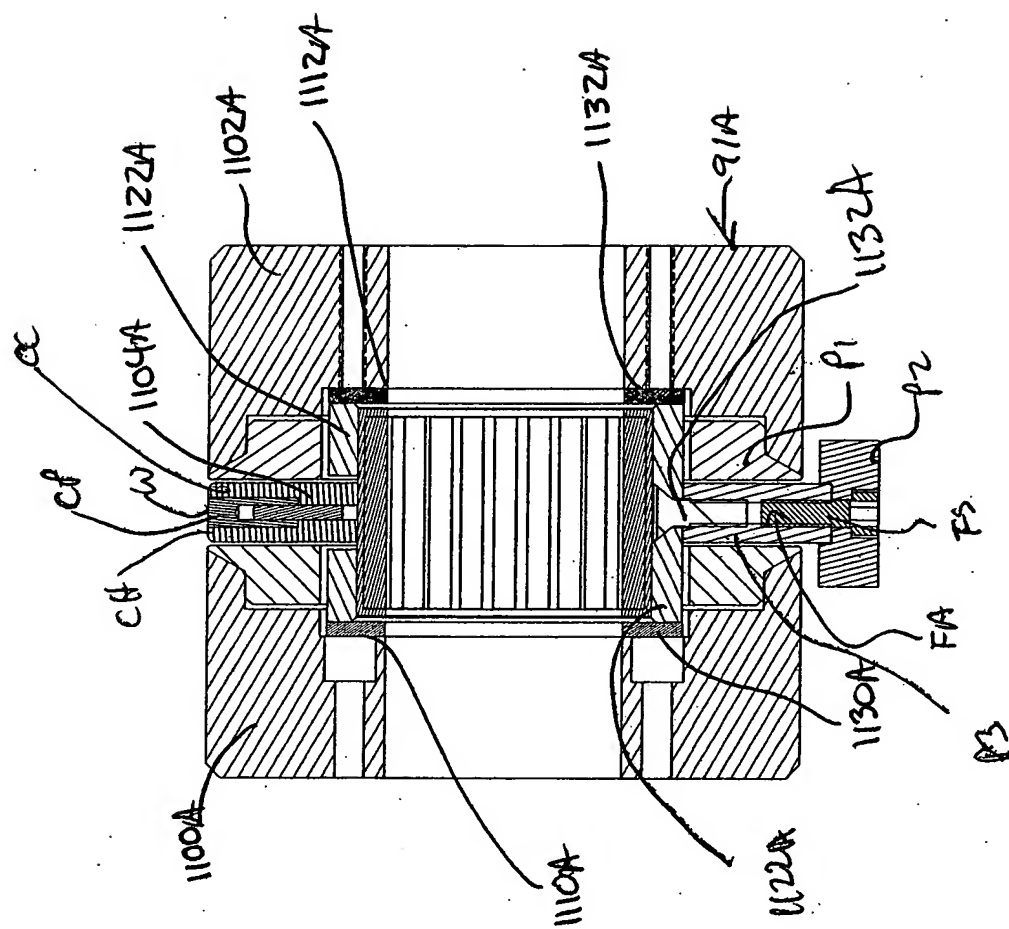


FIG. 149A

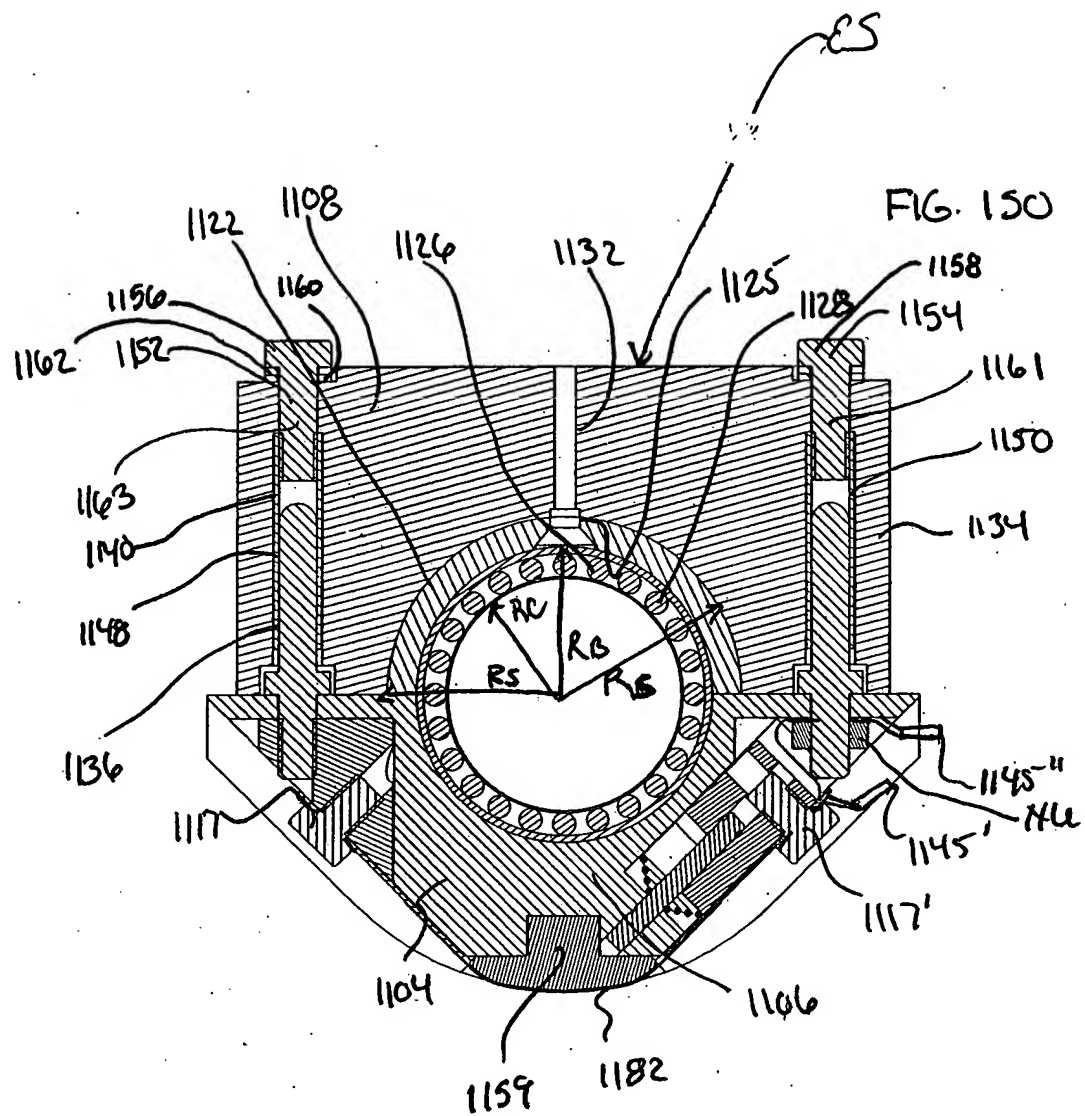


FIG. 1504

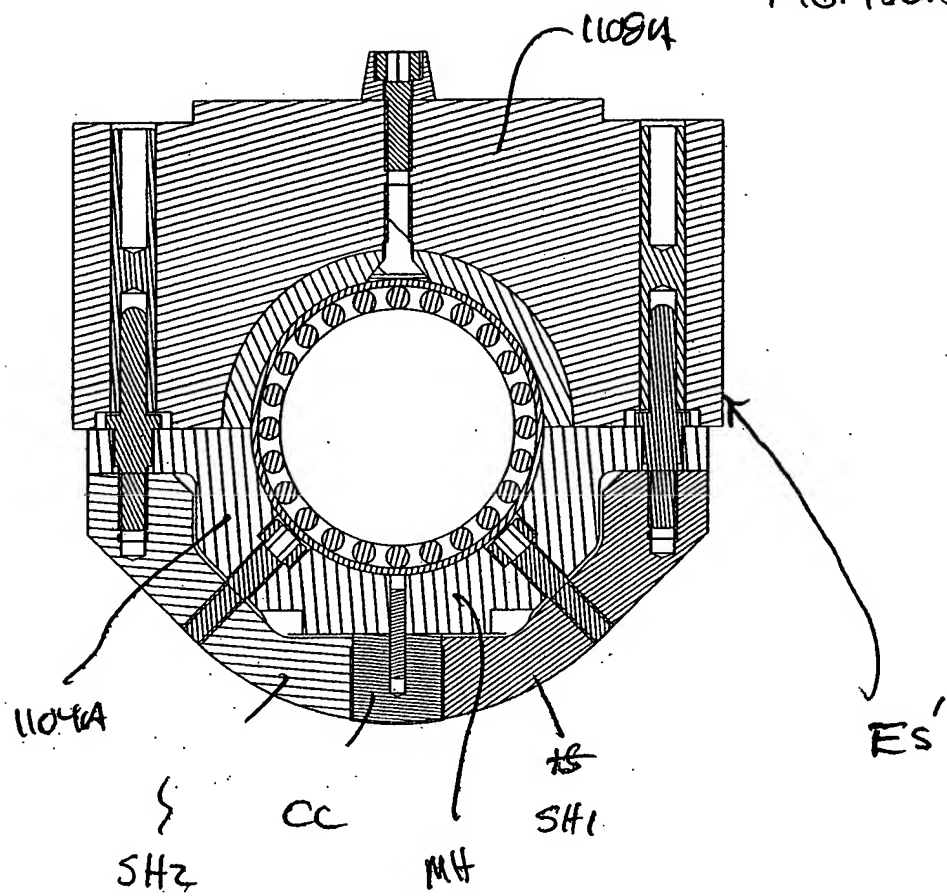


FIG. 151

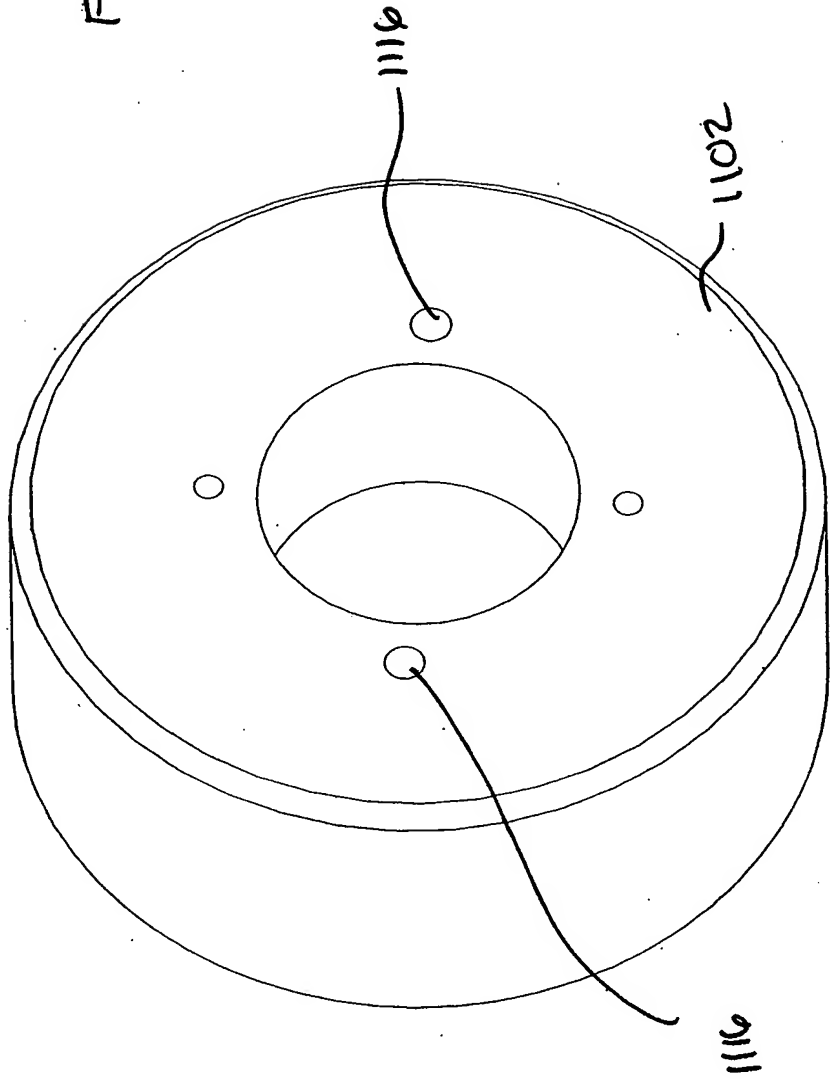


FIG. 151A

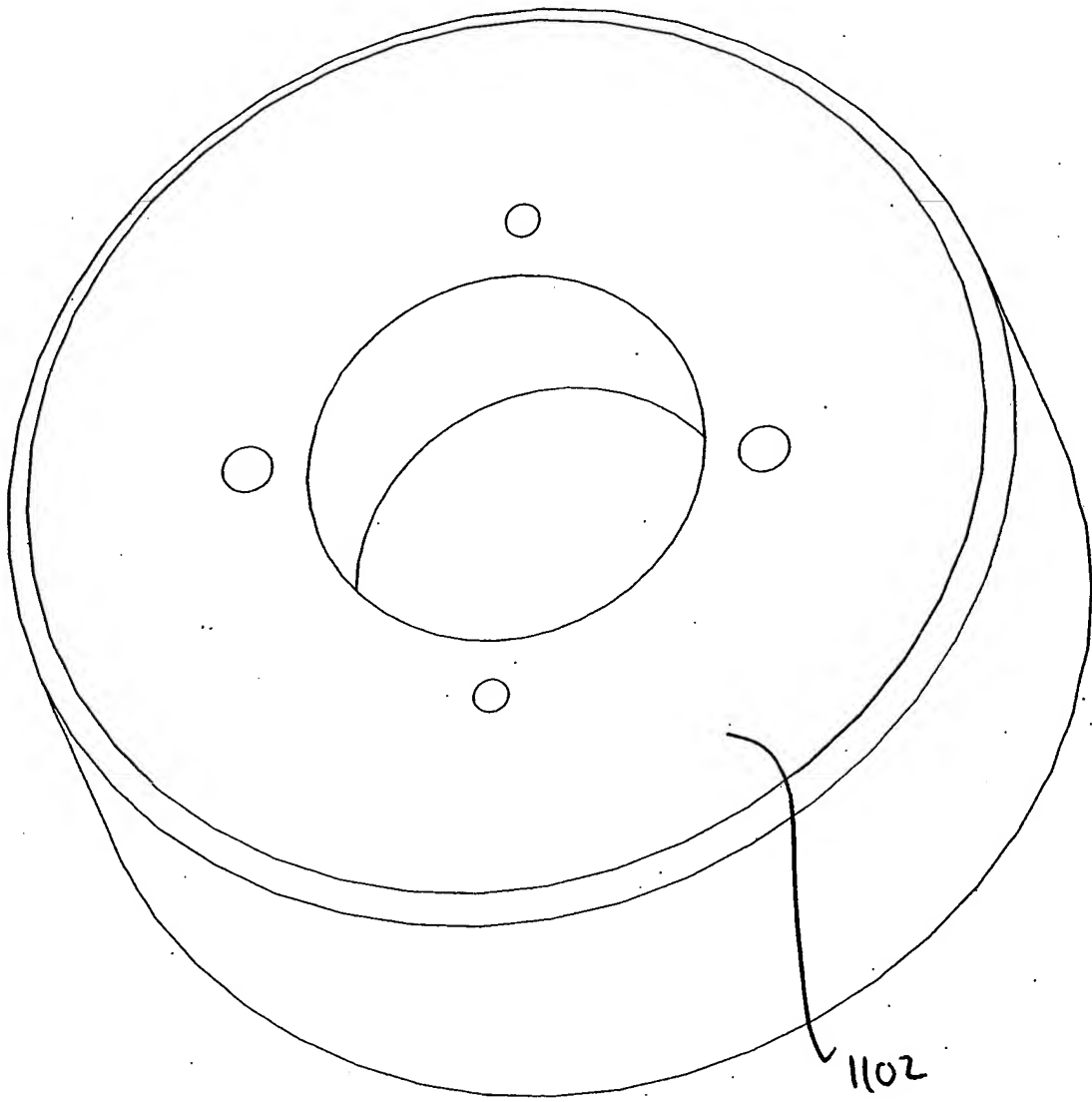


FIG. 152

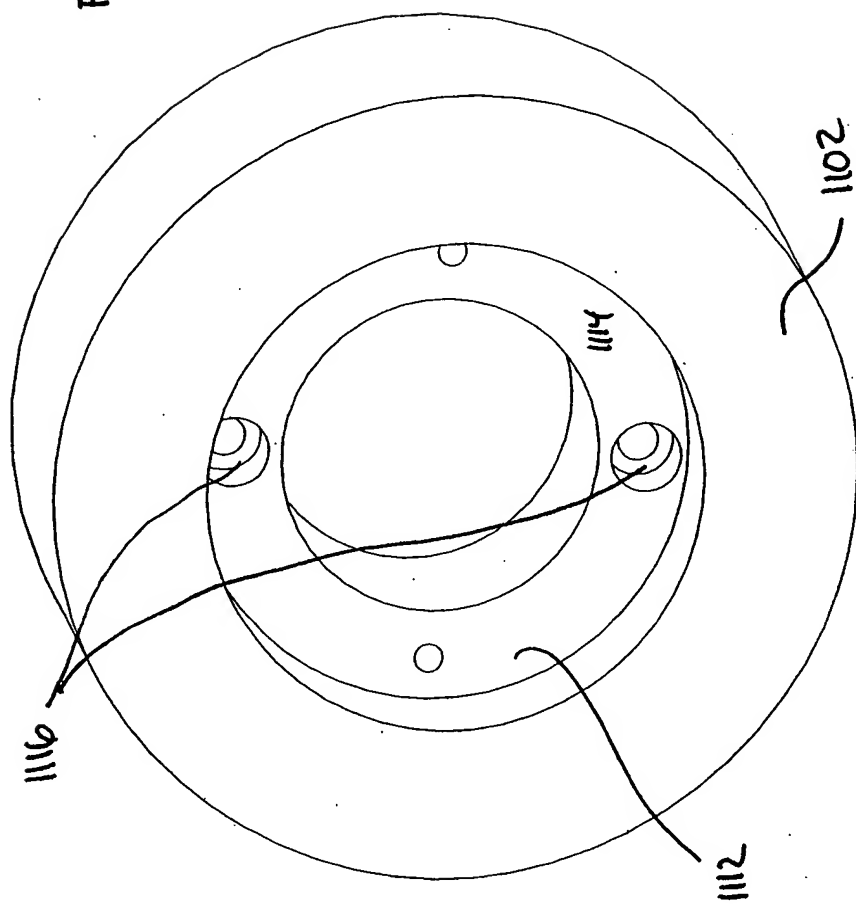
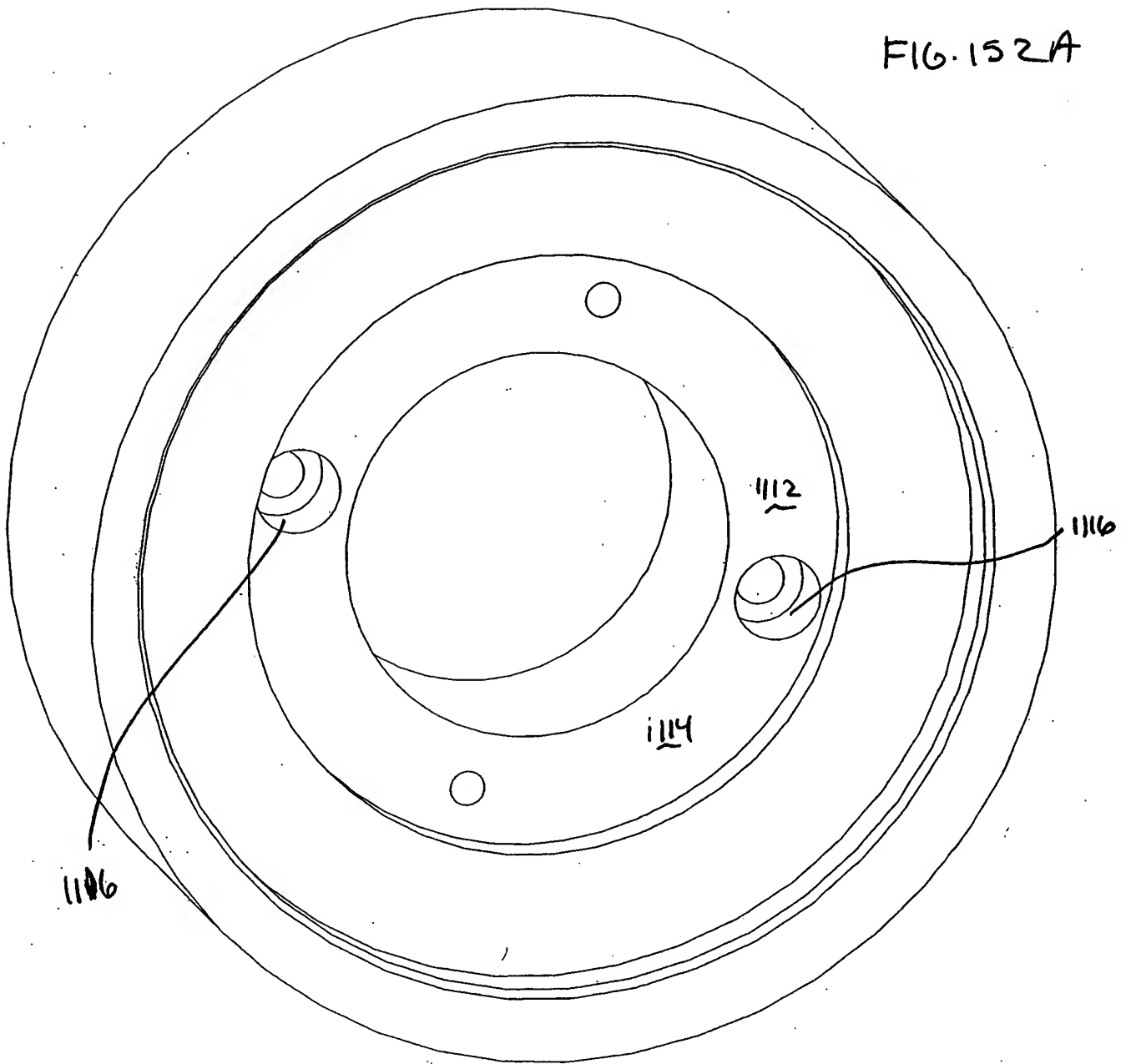


FIG. 152A



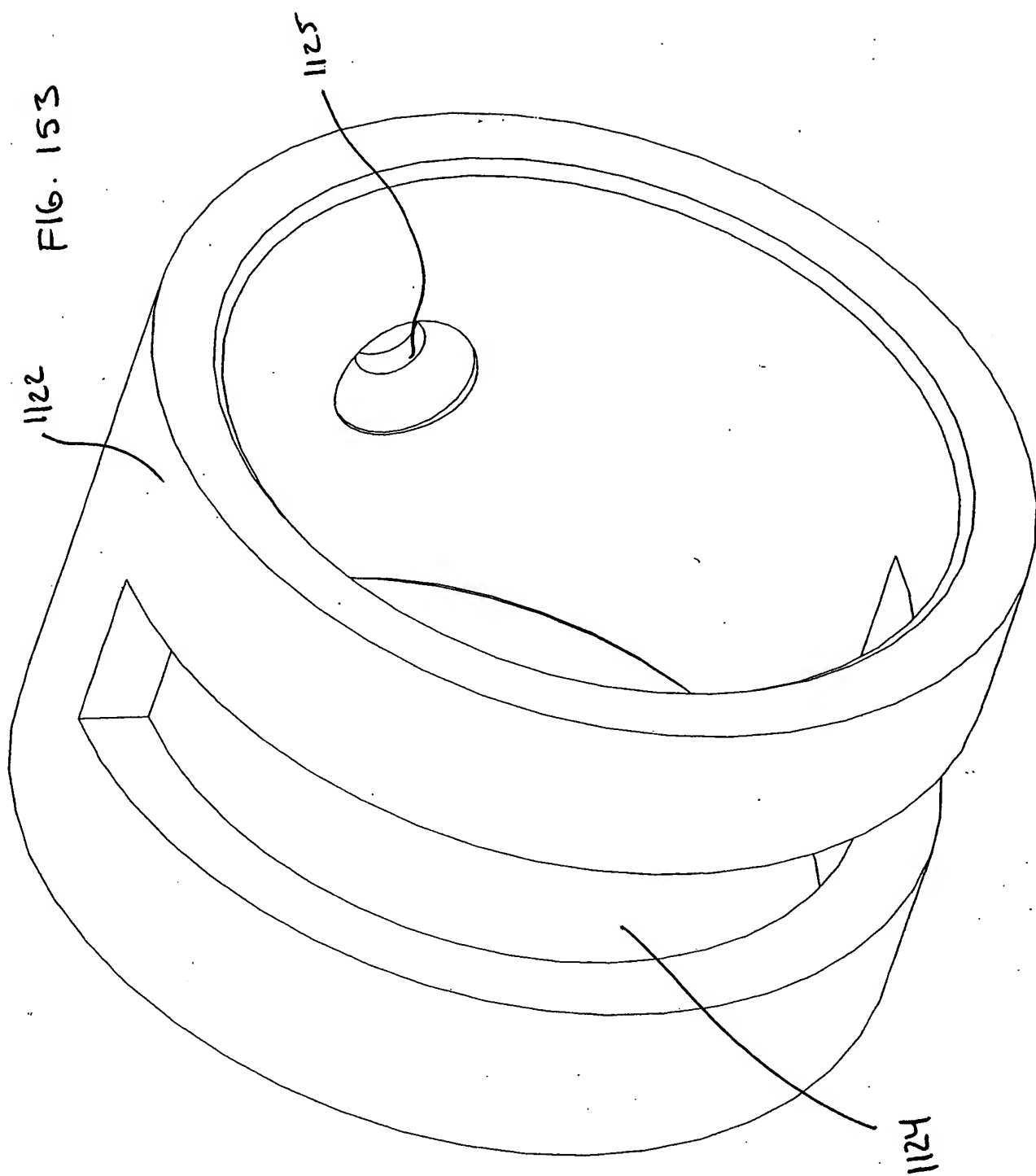


FIG. 154

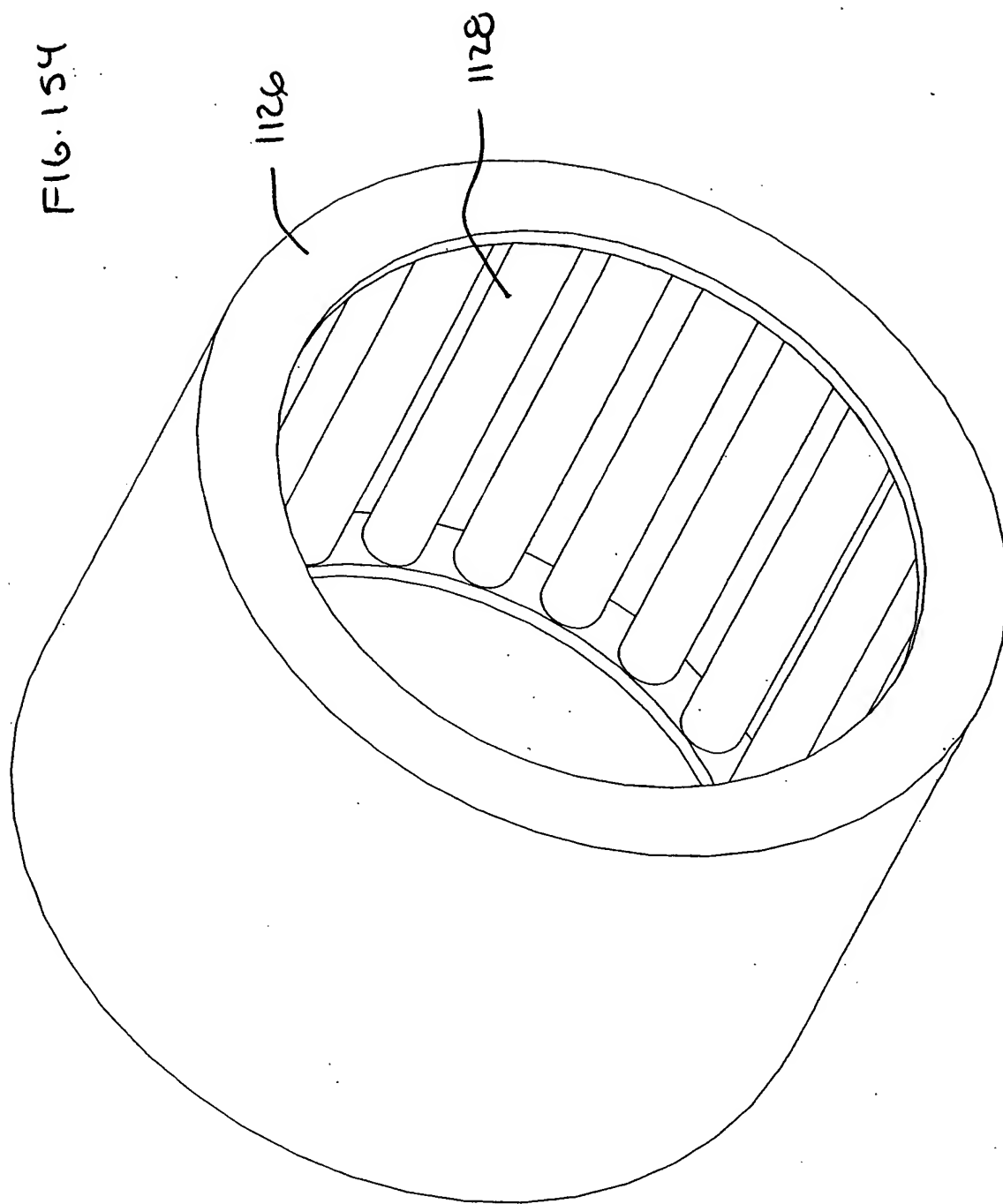
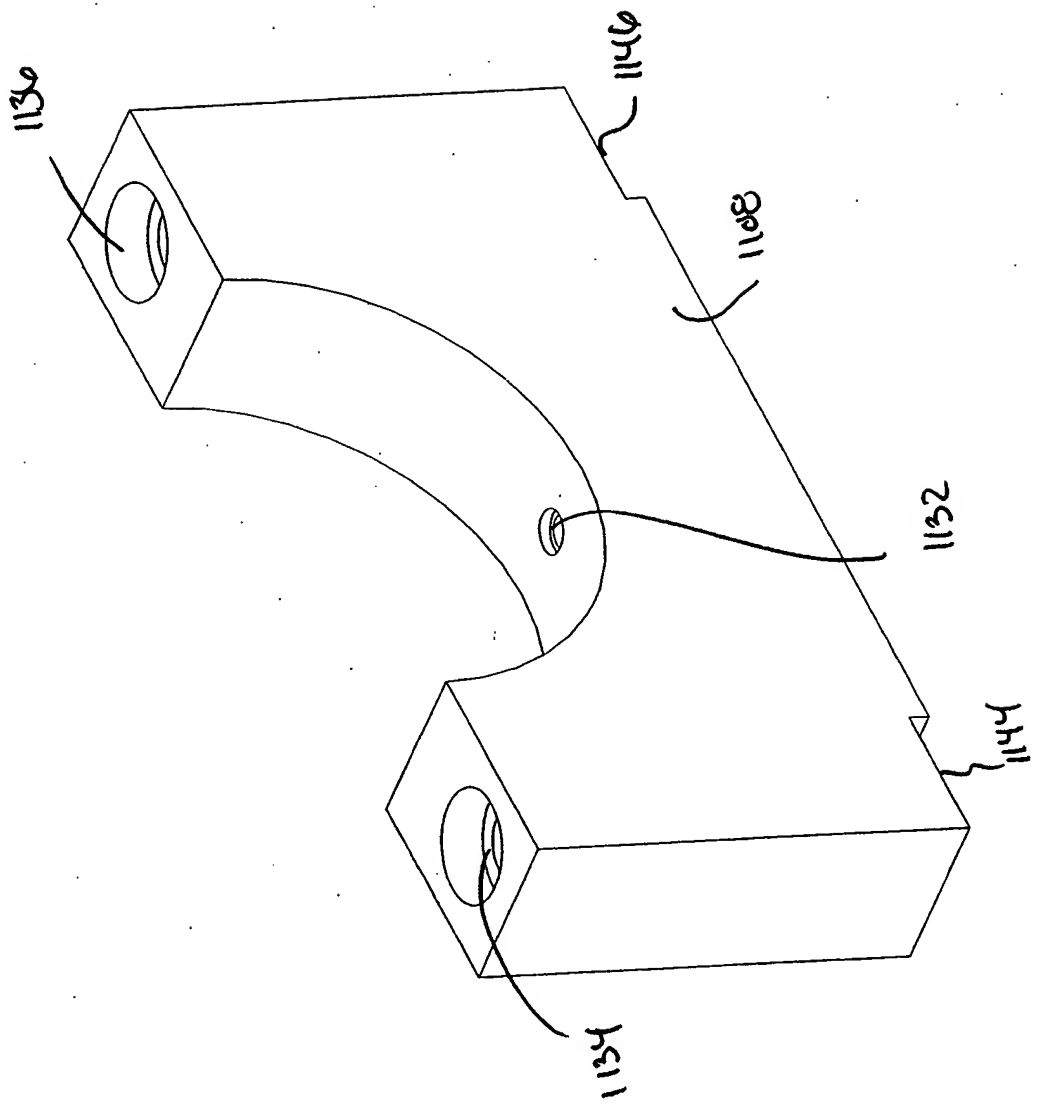


FIG. 155



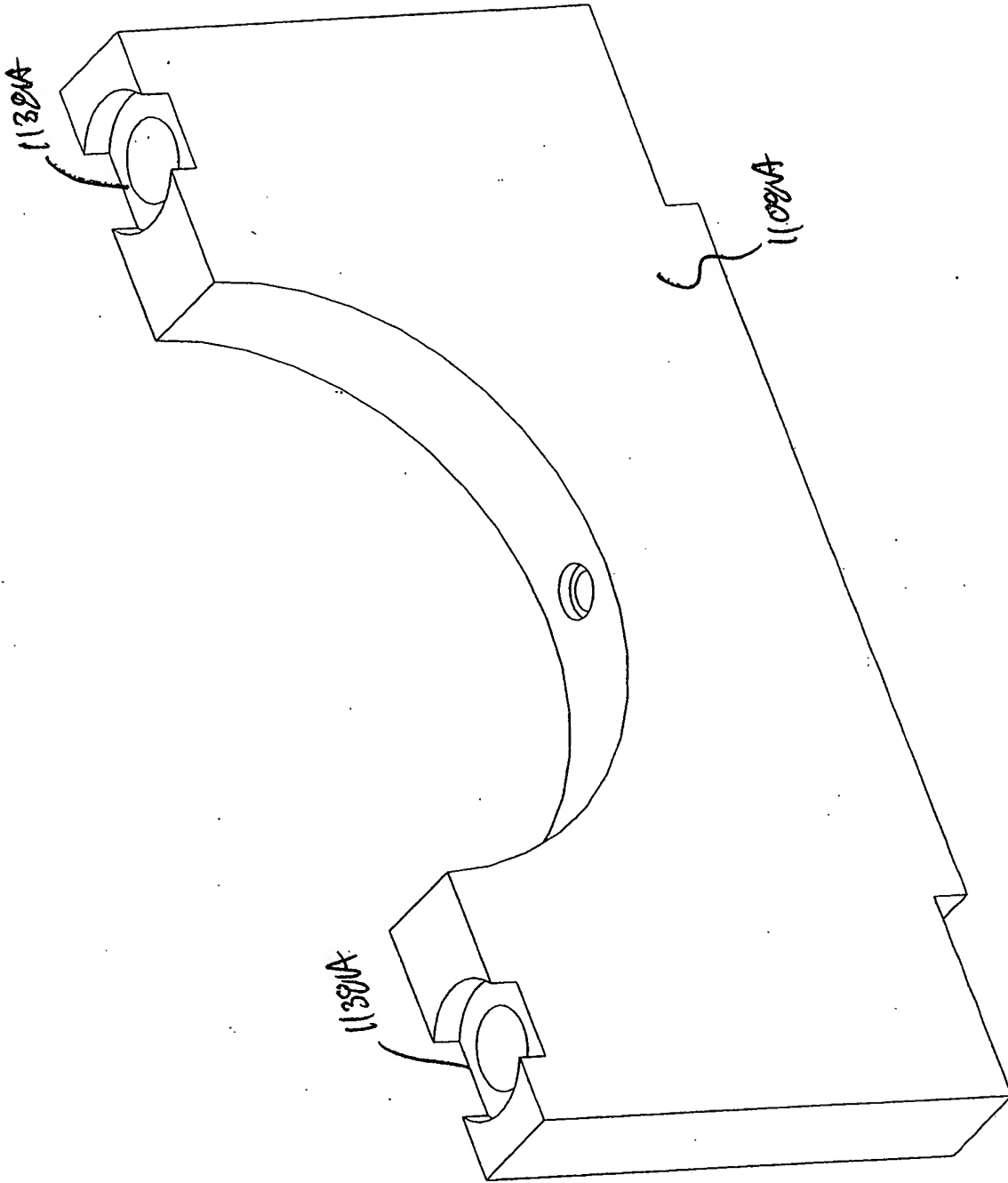


FIG. 155A

FIG. 15C

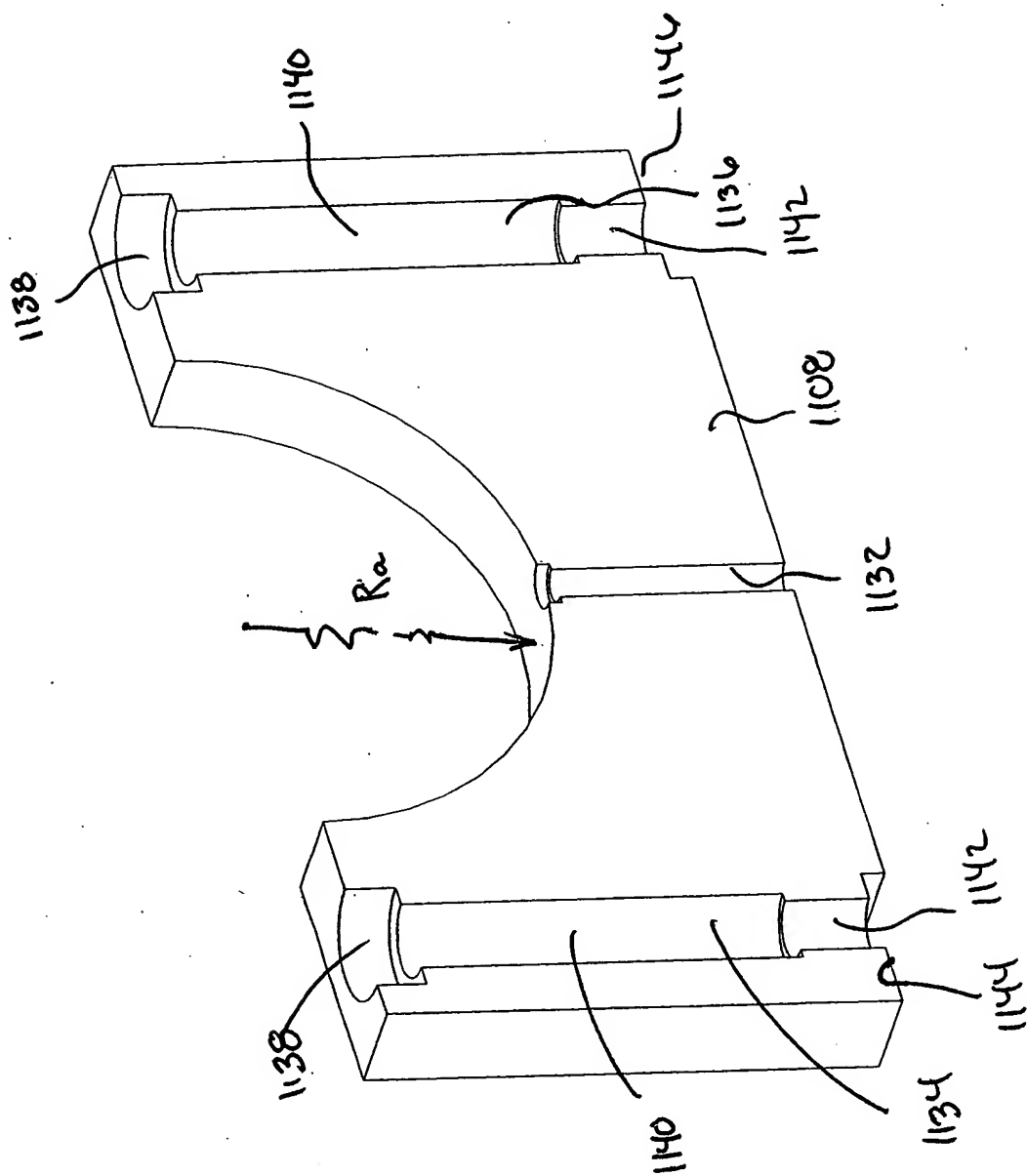
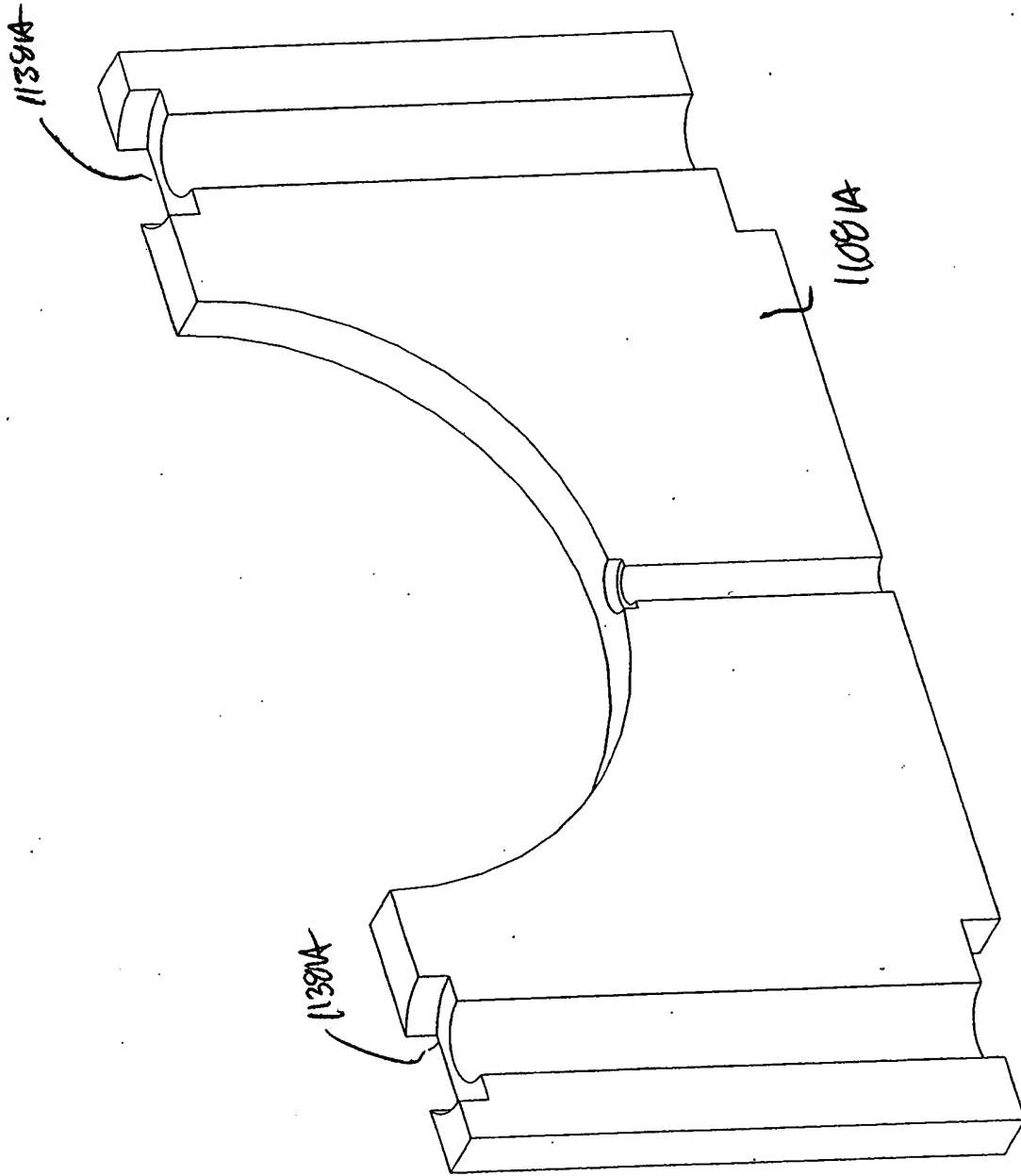


FIG. 156A



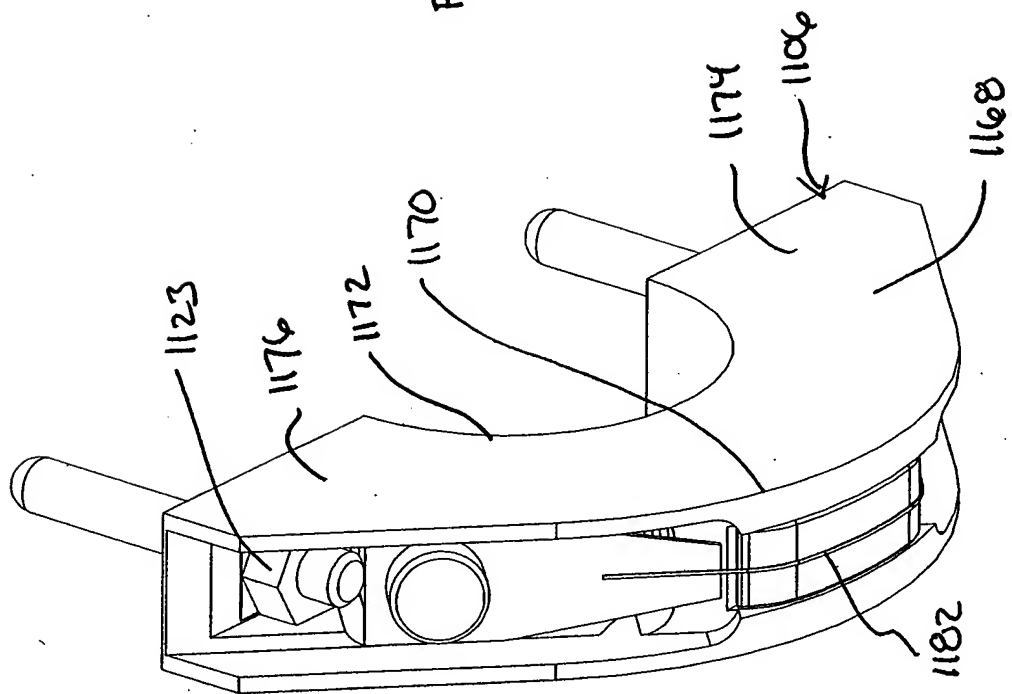


FIG. 157

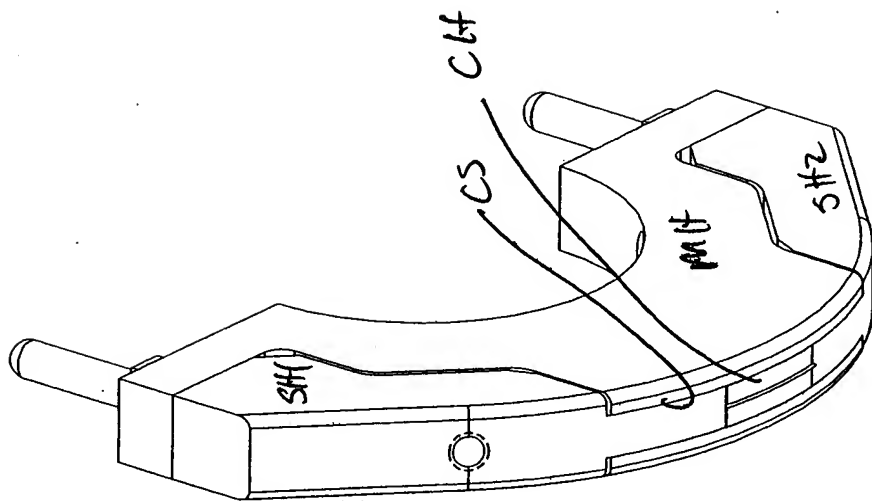
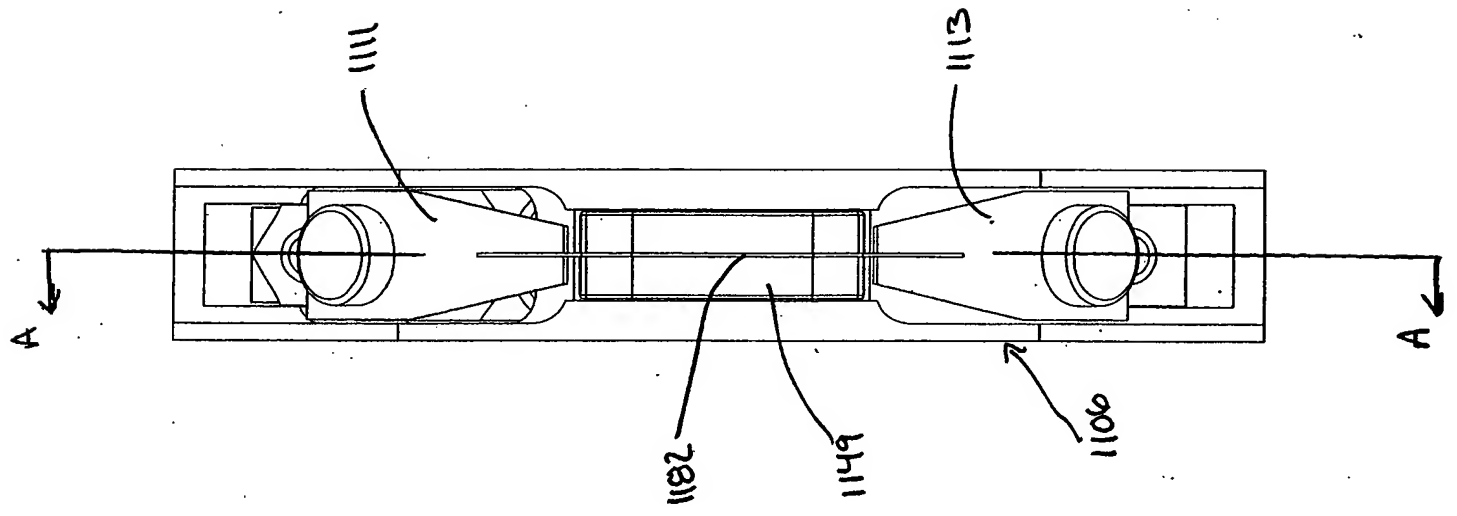


FIG. 157A

FIG. 158



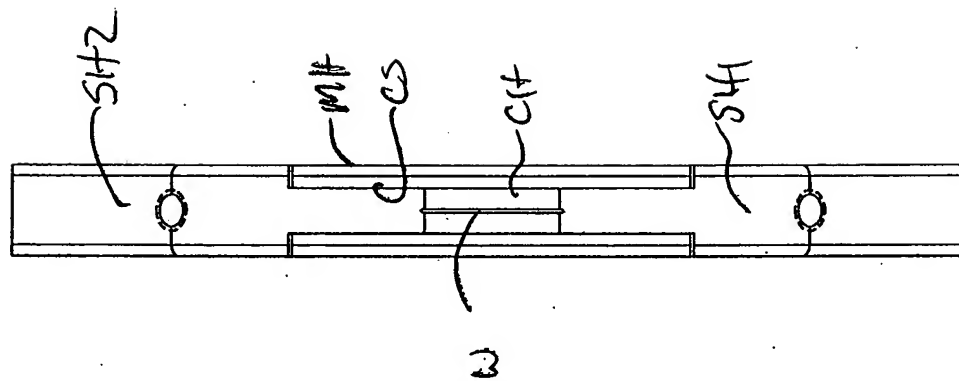
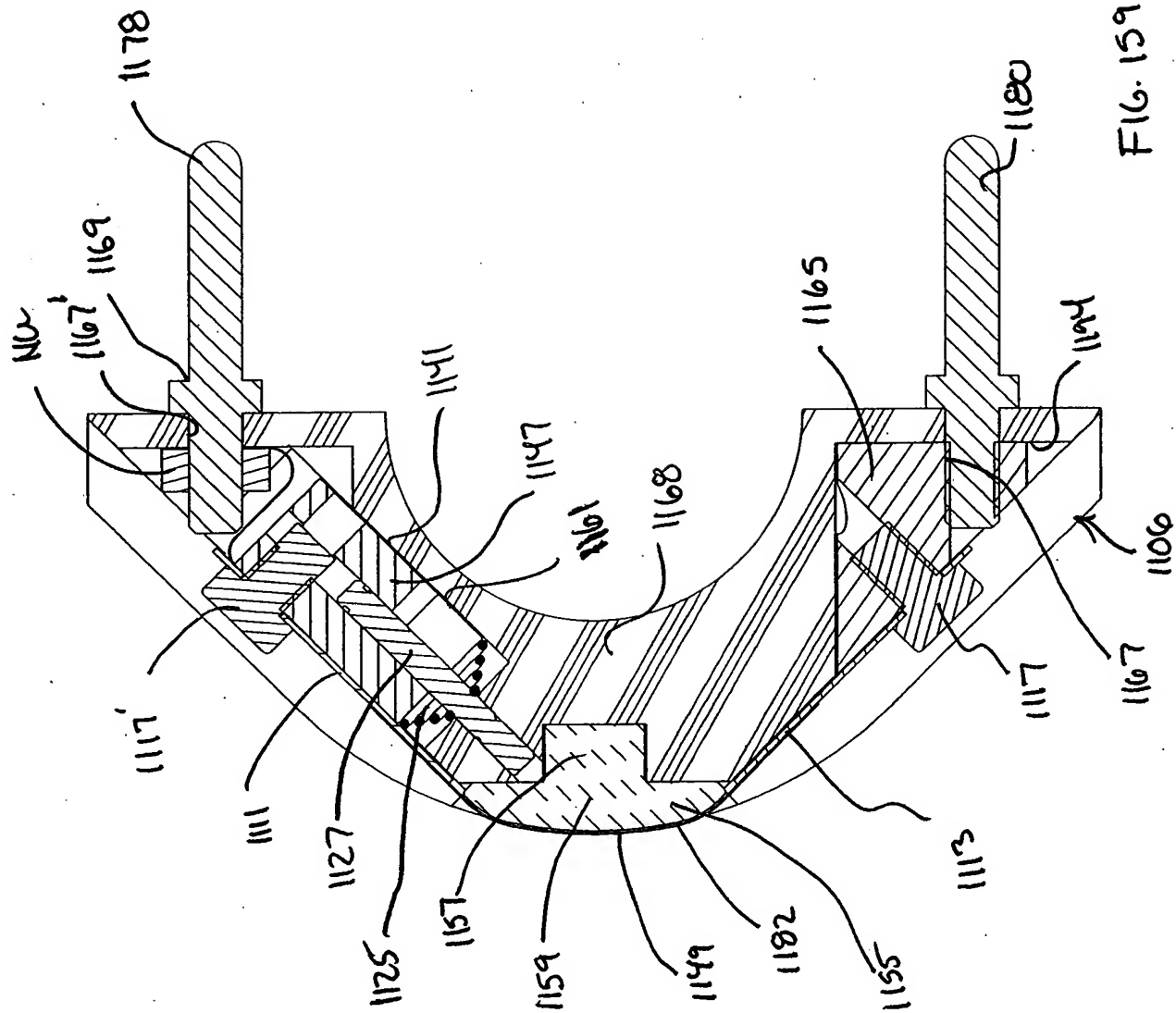


FIG. 158A



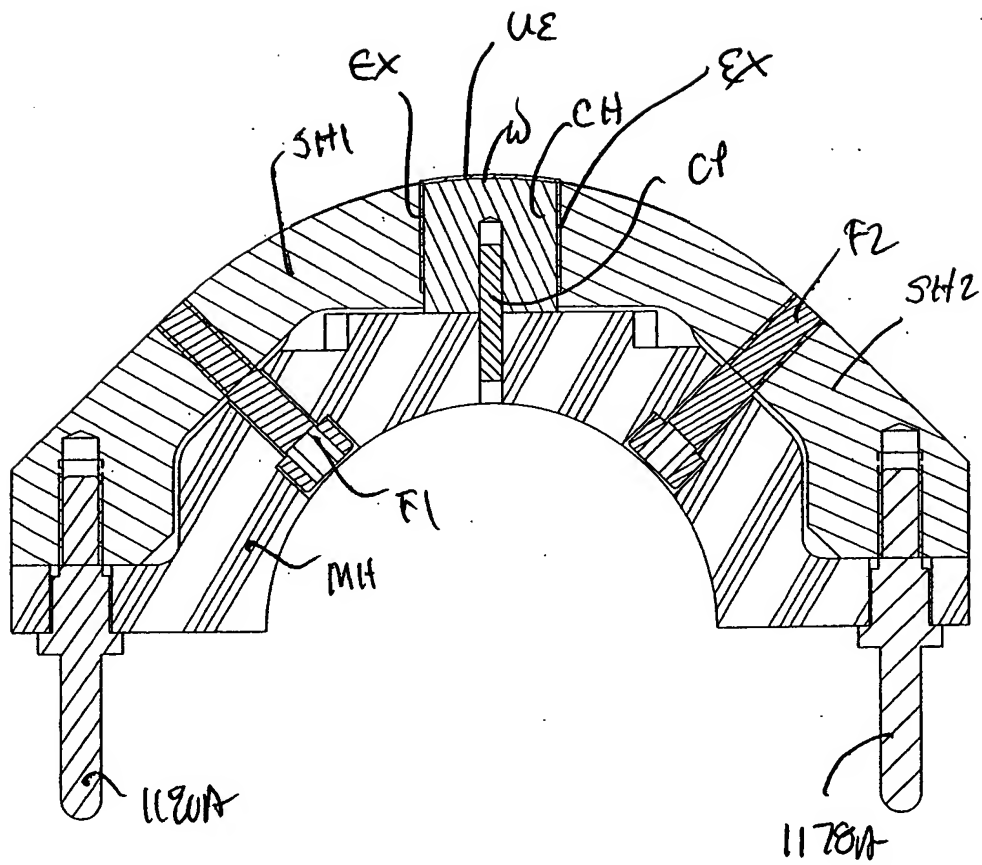


FIG-159A

FIG. 160

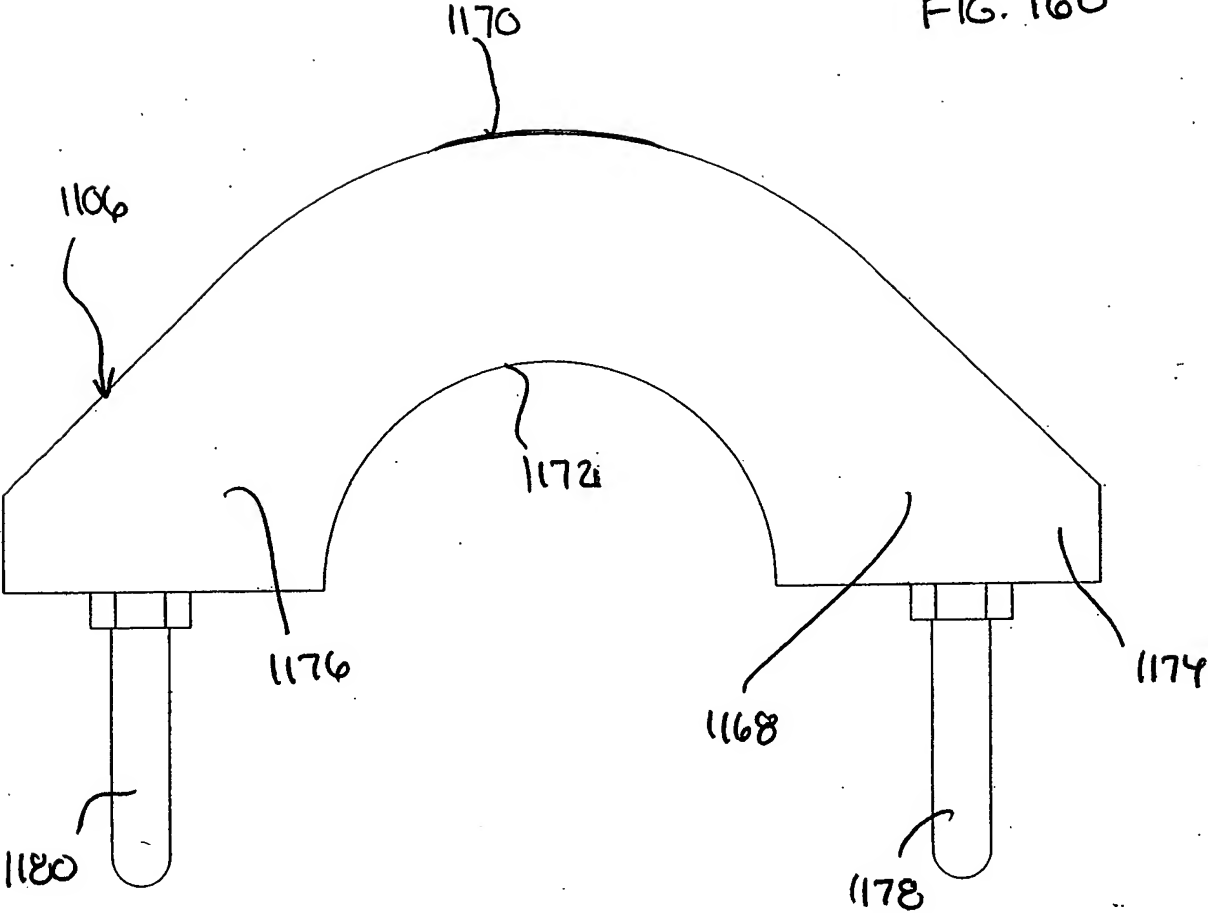
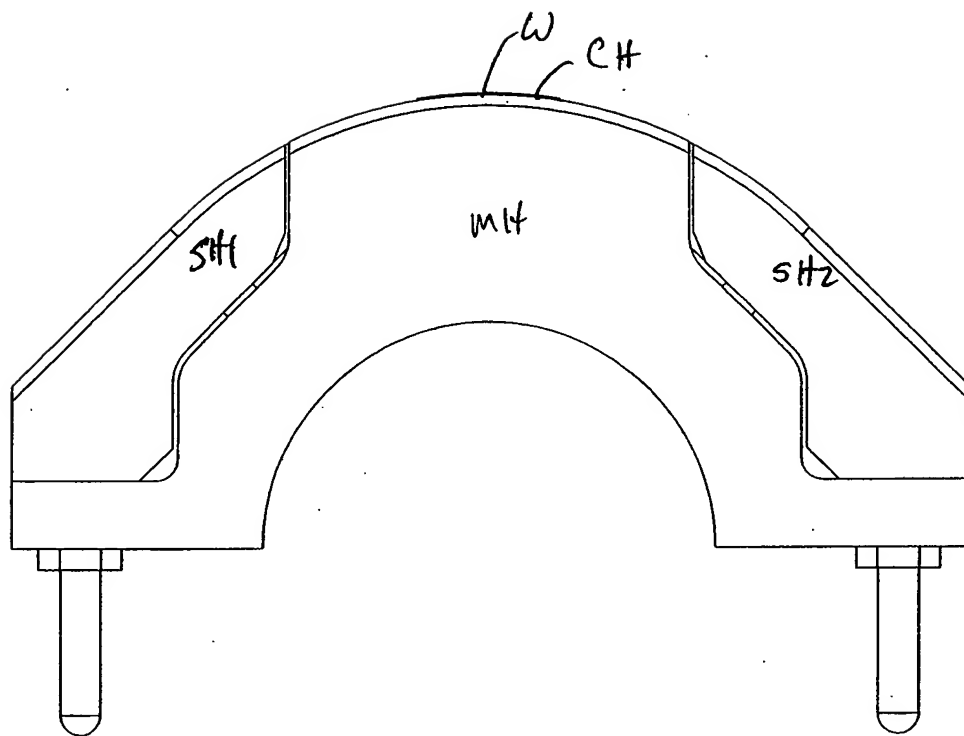


FIG. 1601A



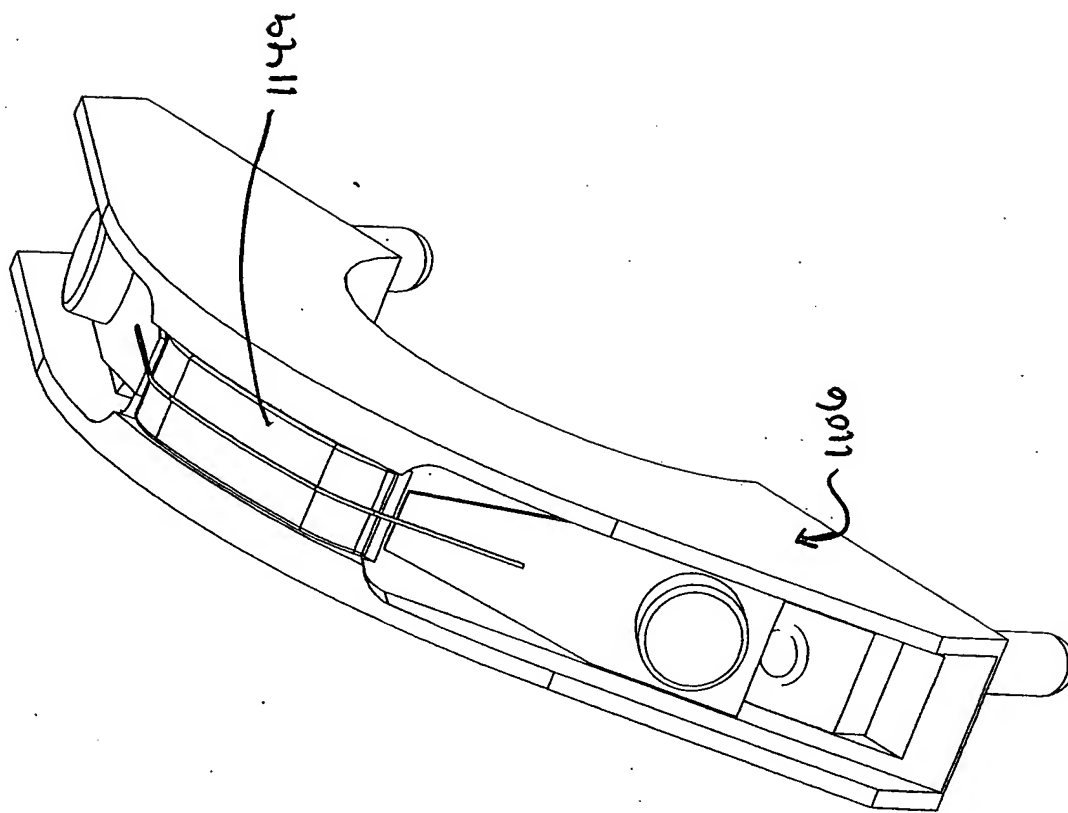


FIG. 161

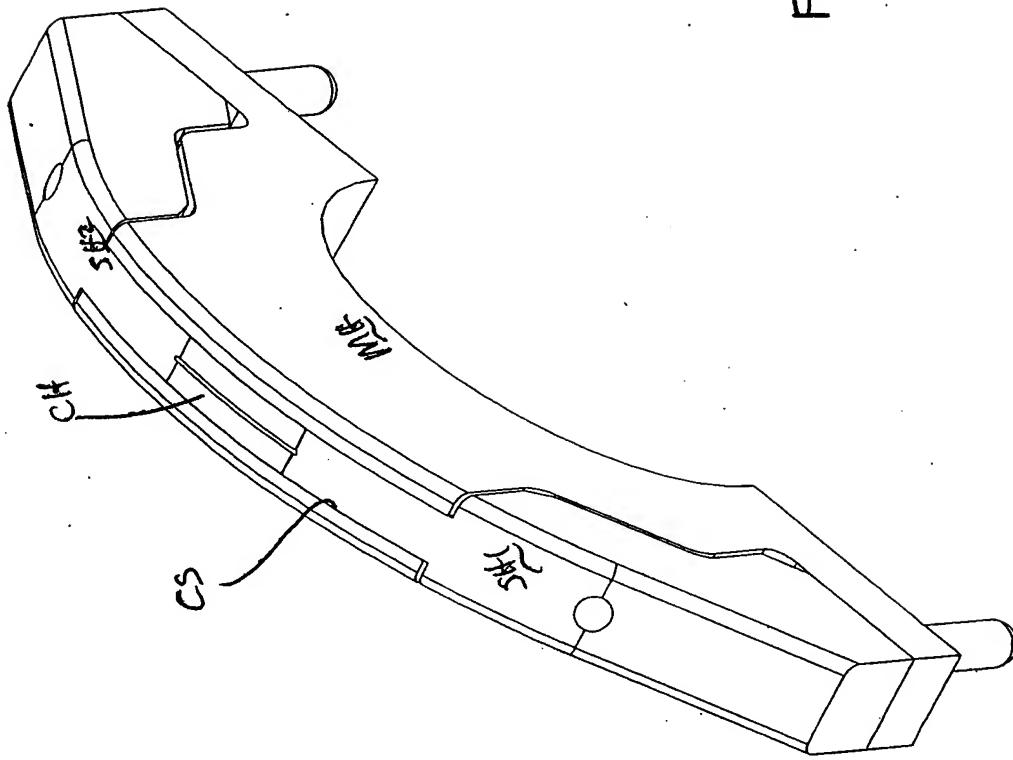


FIG. 16A

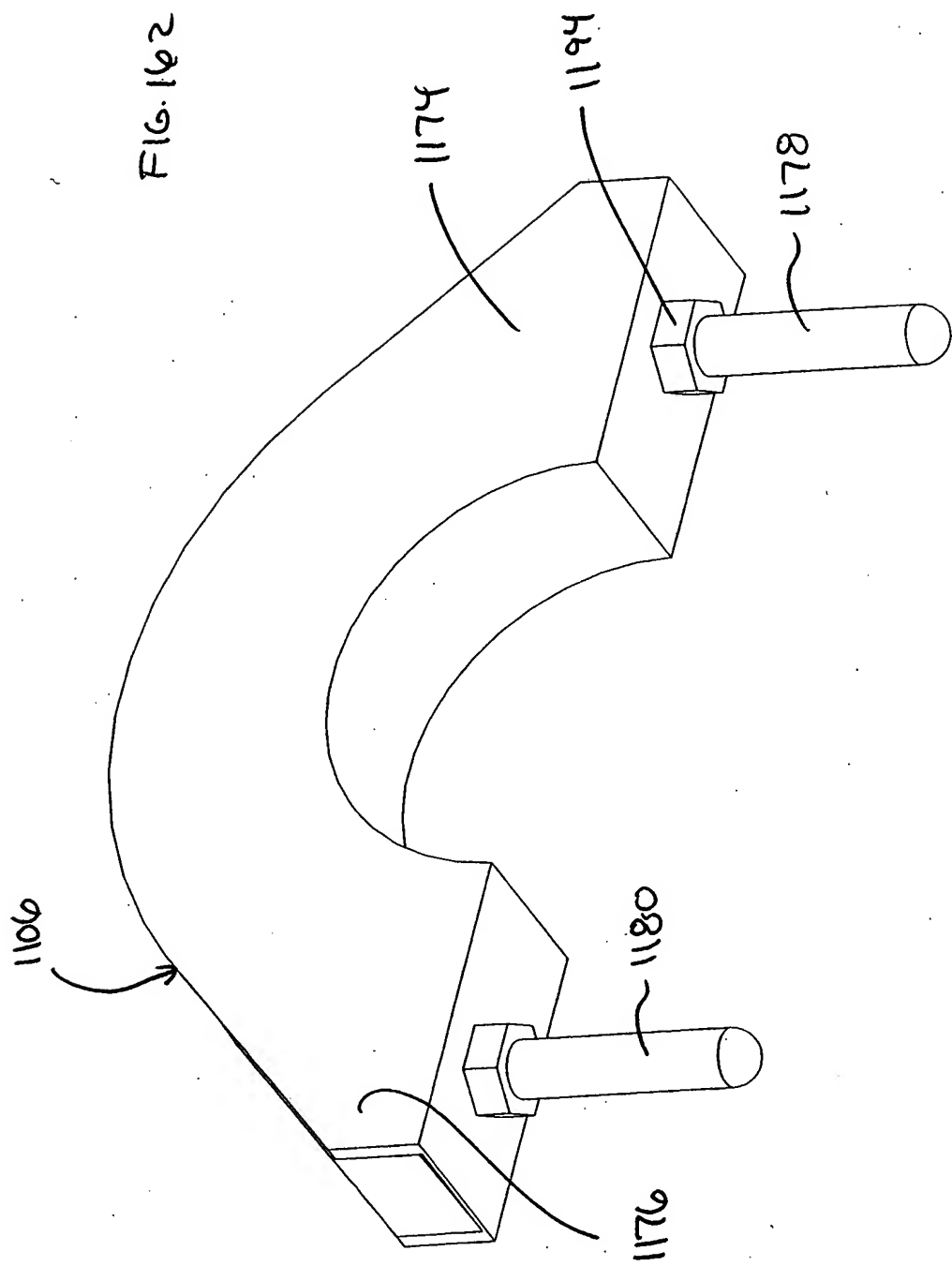
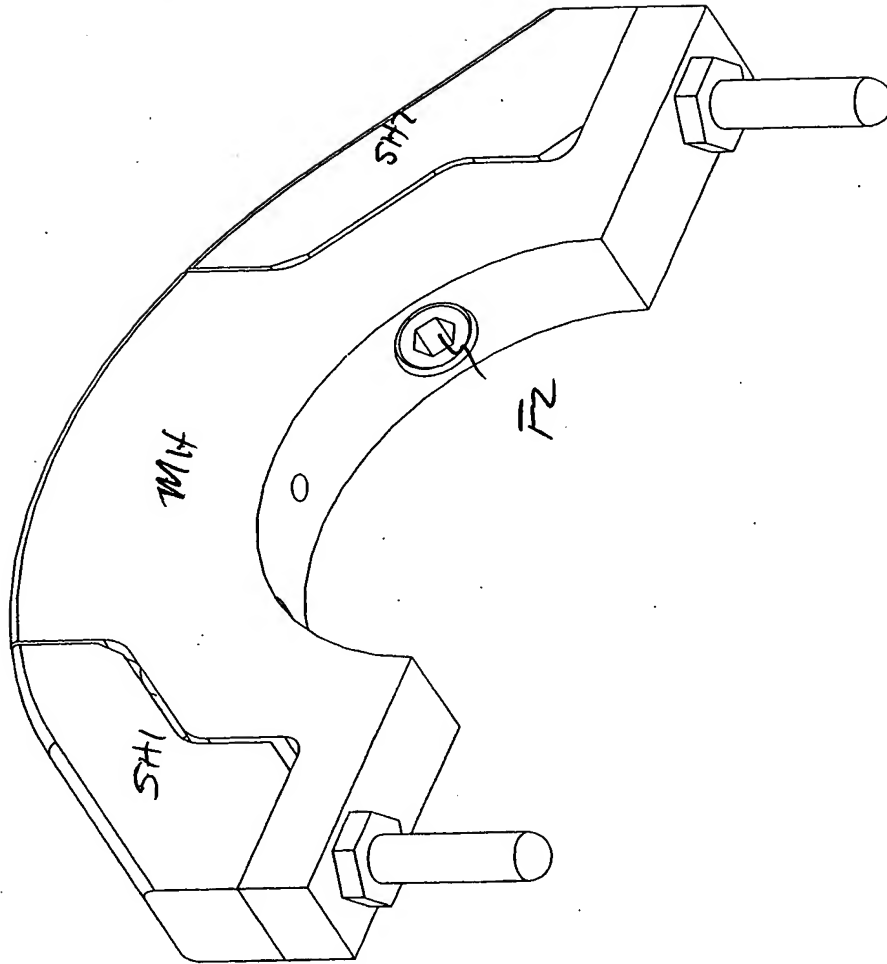


FIG. 162A



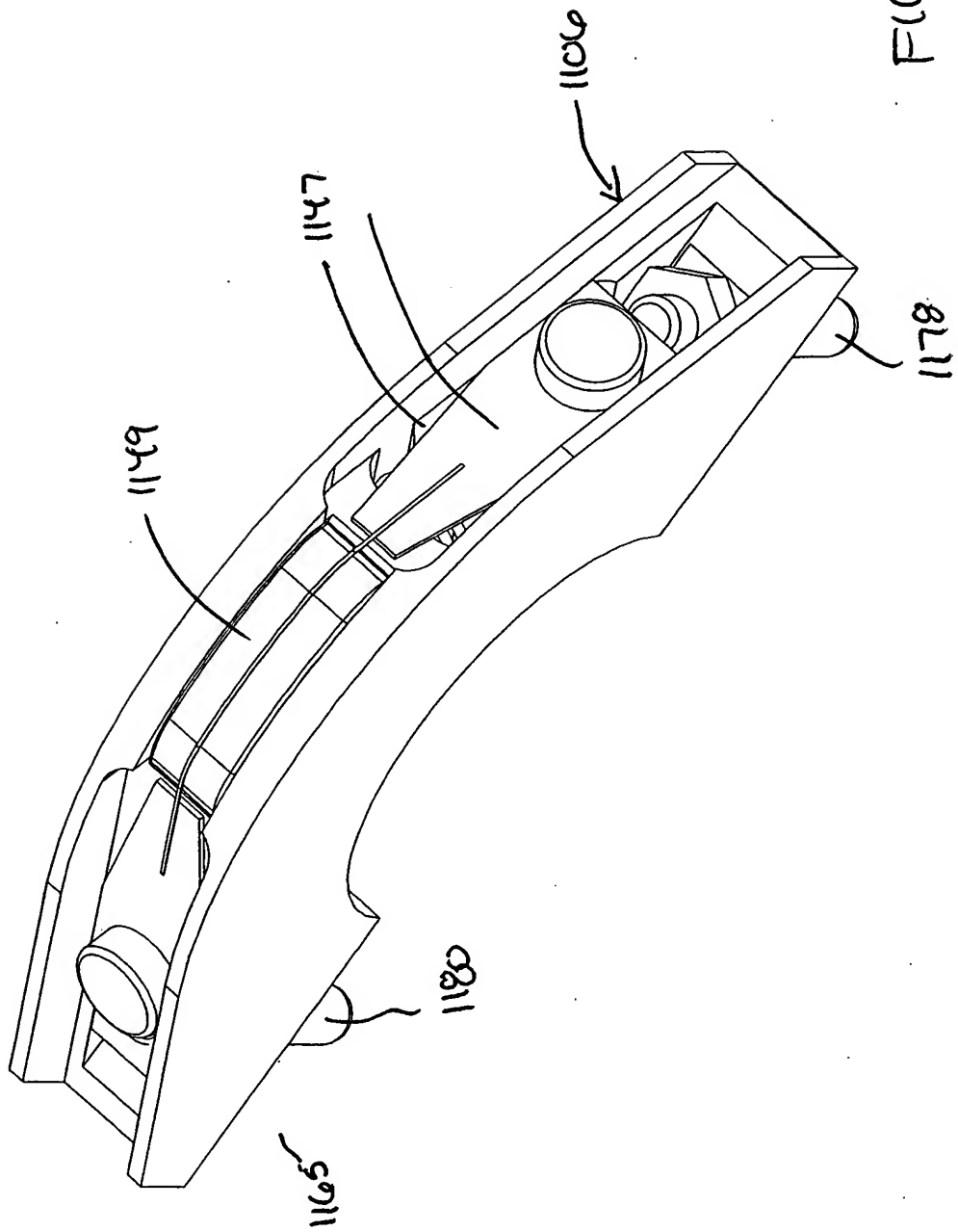


FIG. 163

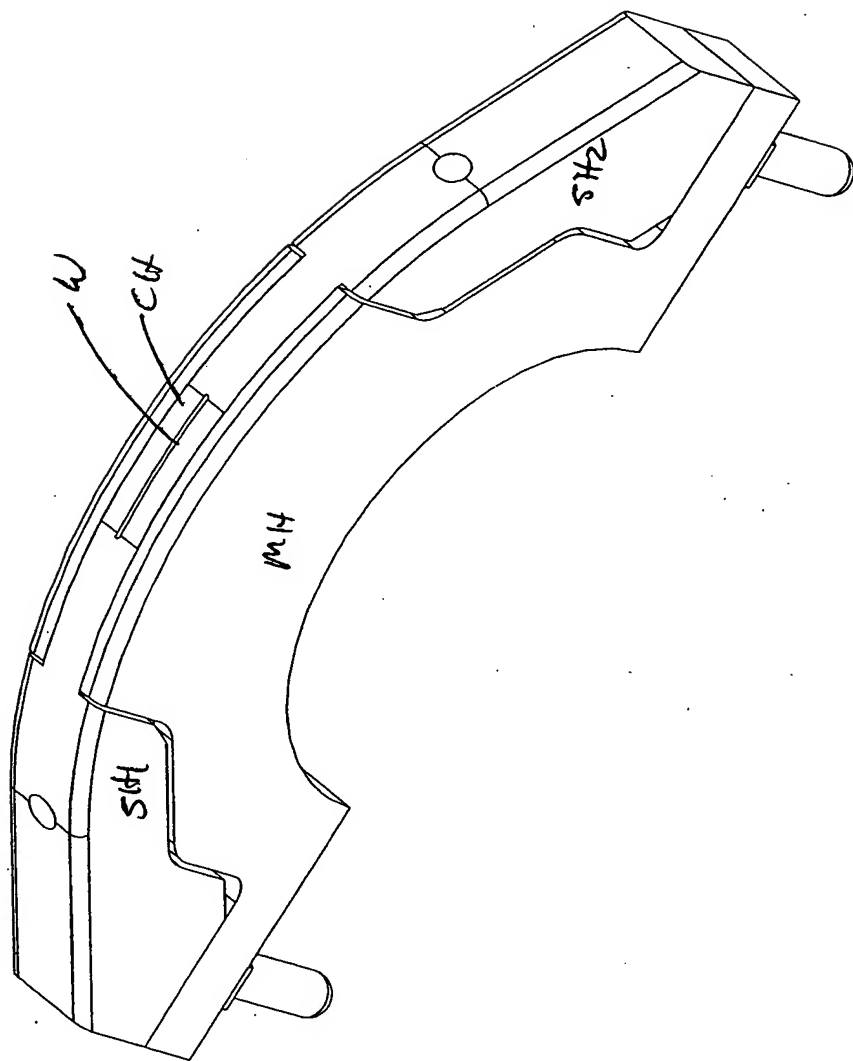


FIG. 163A

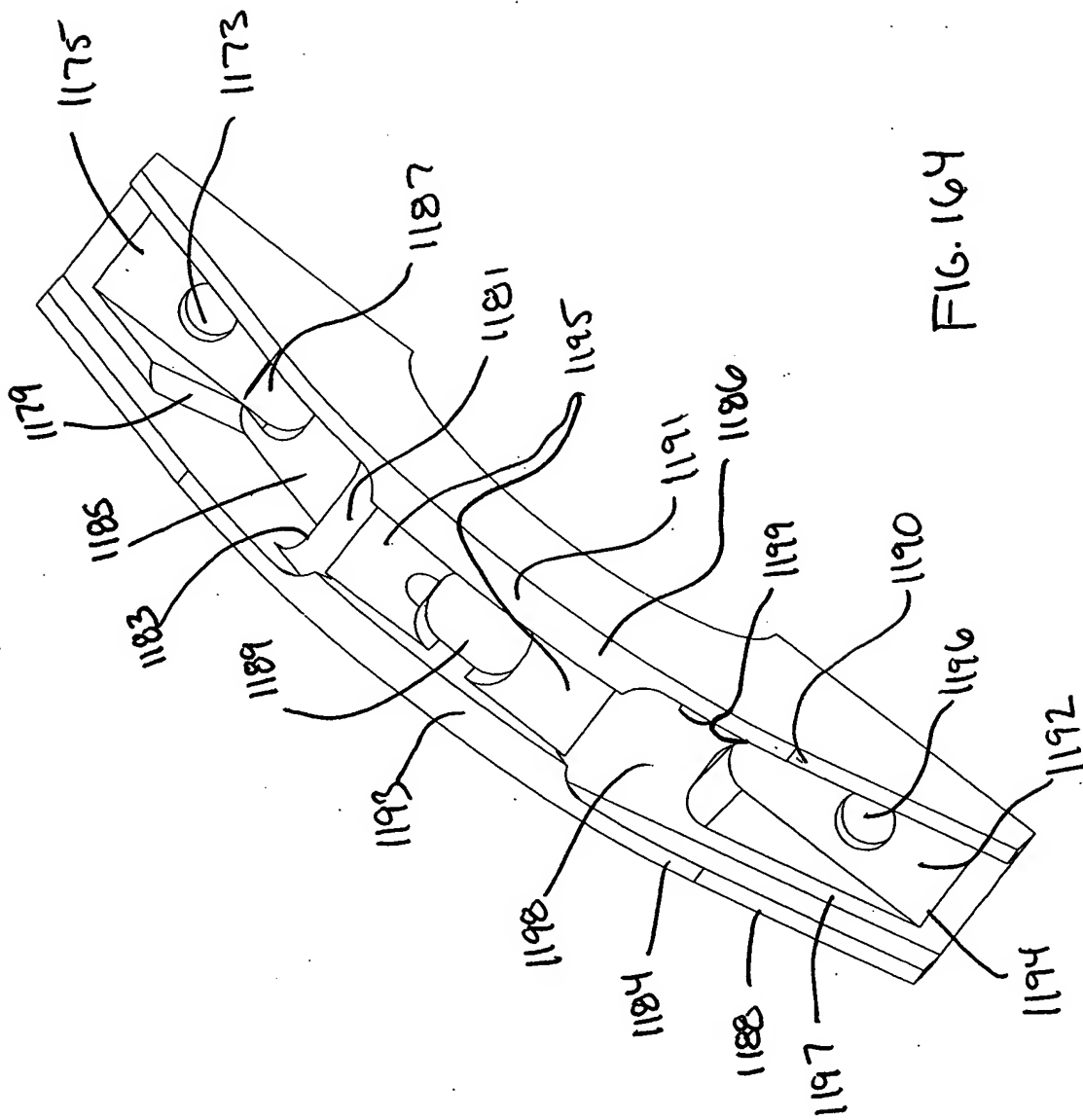


FIG. 164

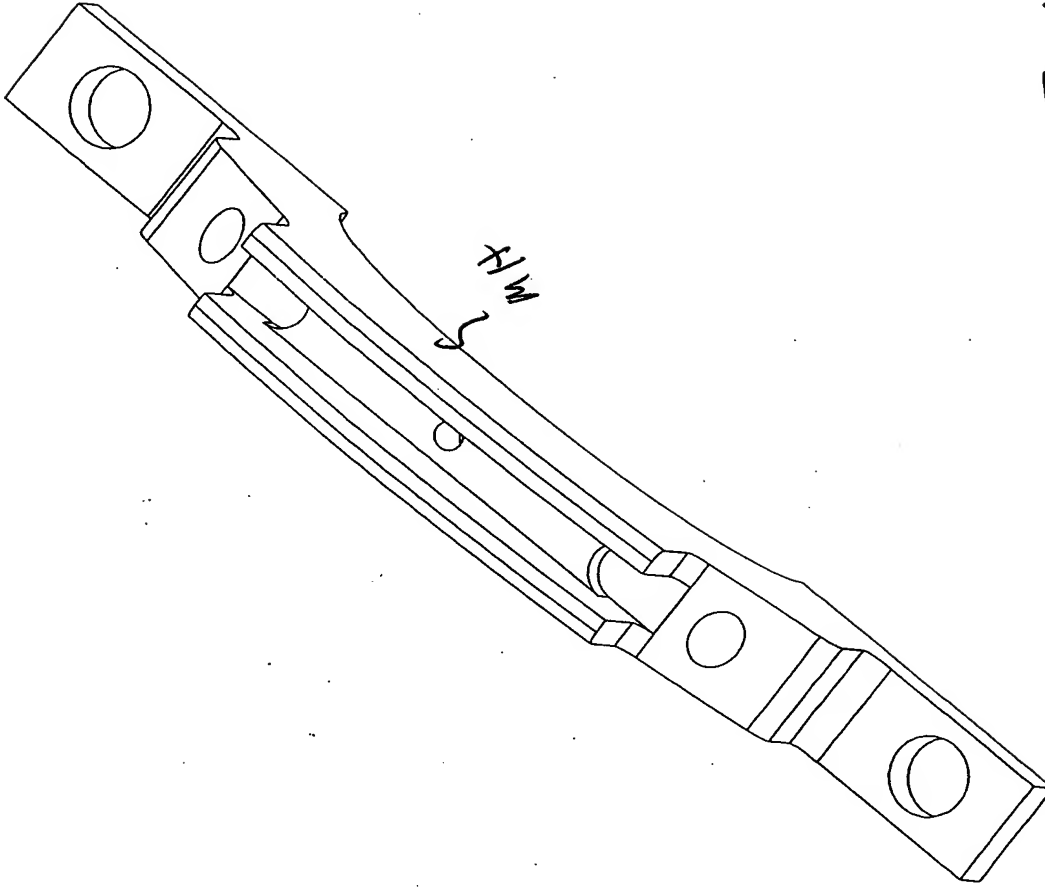


FIG. 164A

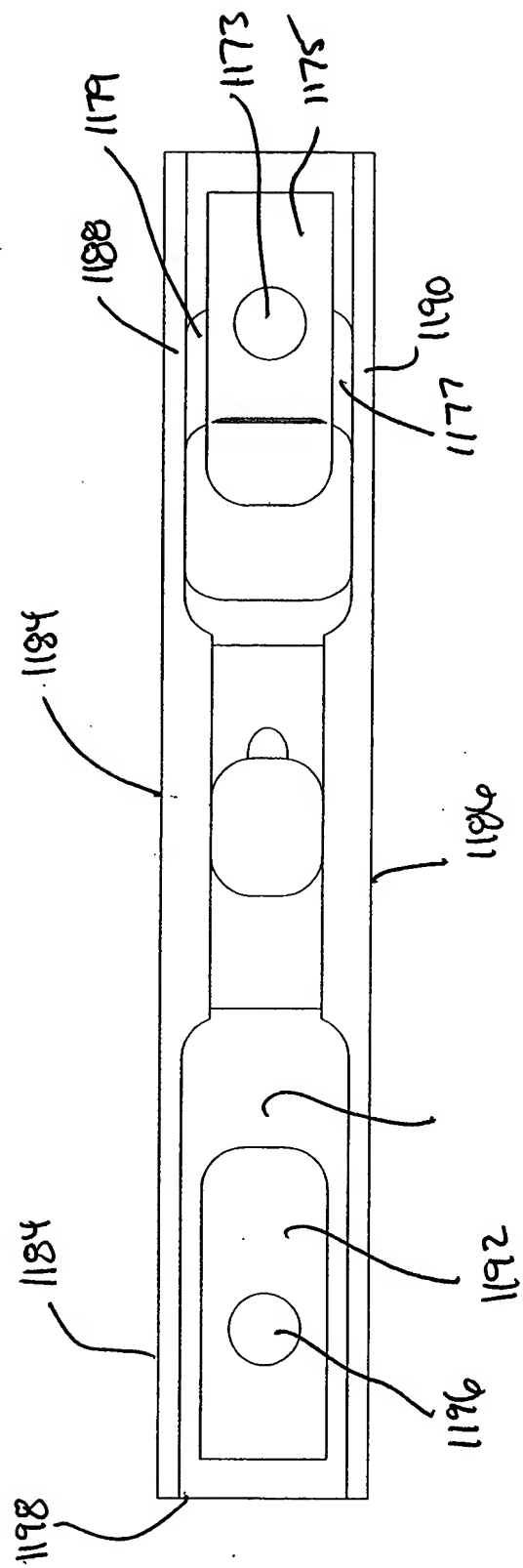


FIG. 165

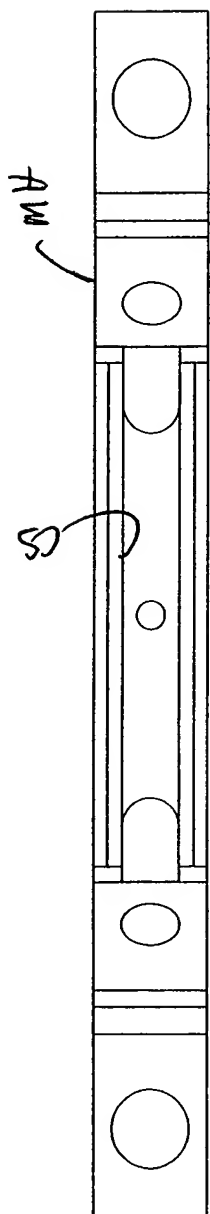


FIG. 165A

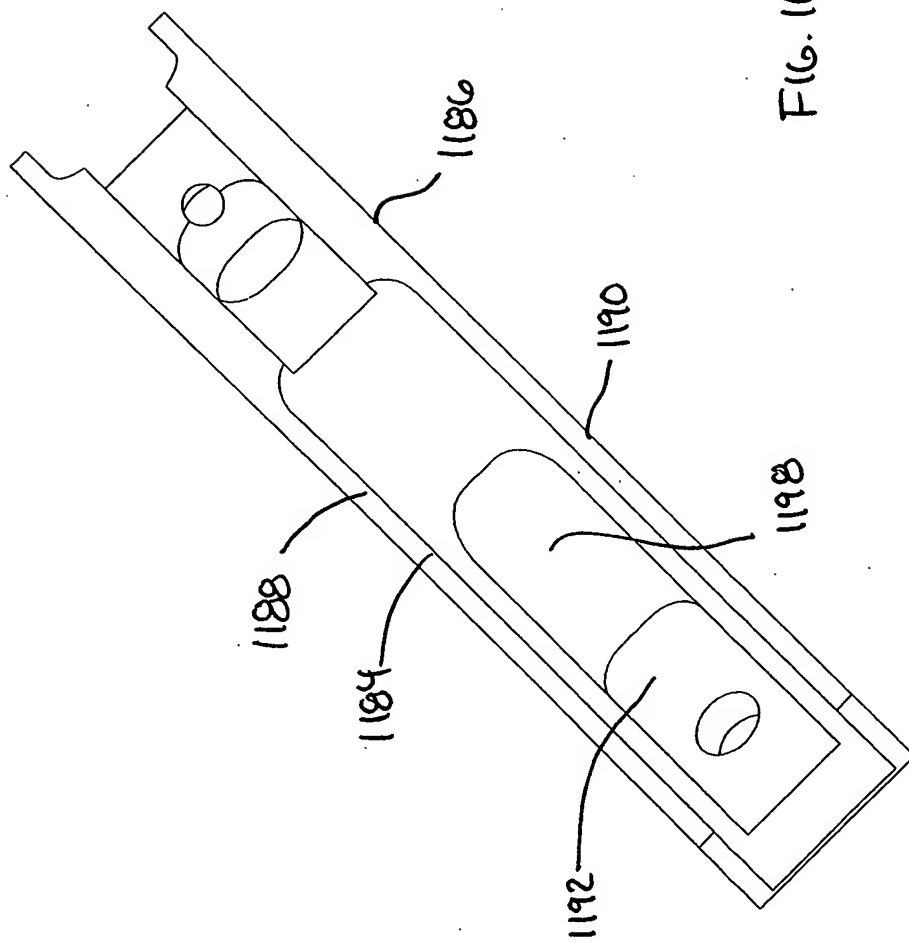


FIG. 166

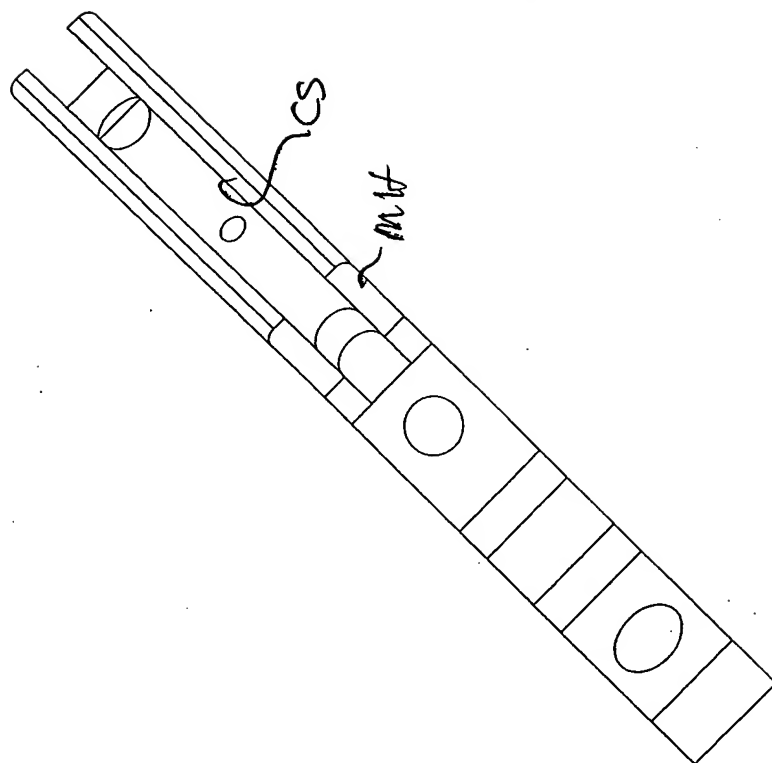


FIG. 166A

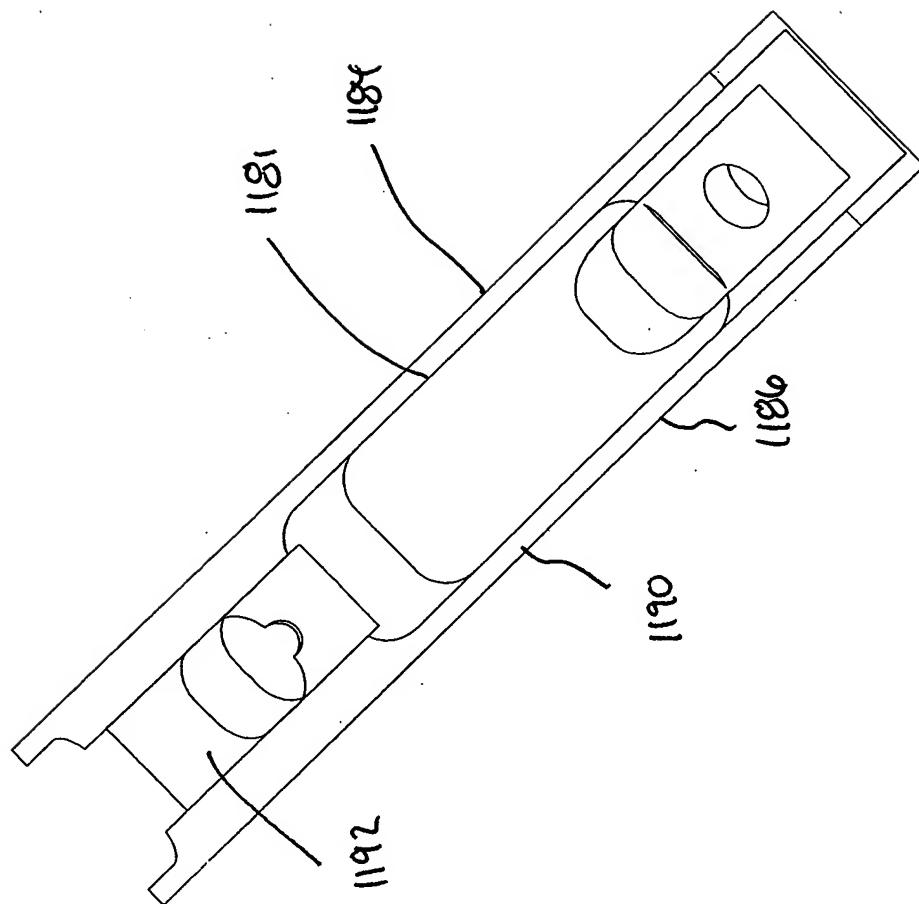


FIG. 167

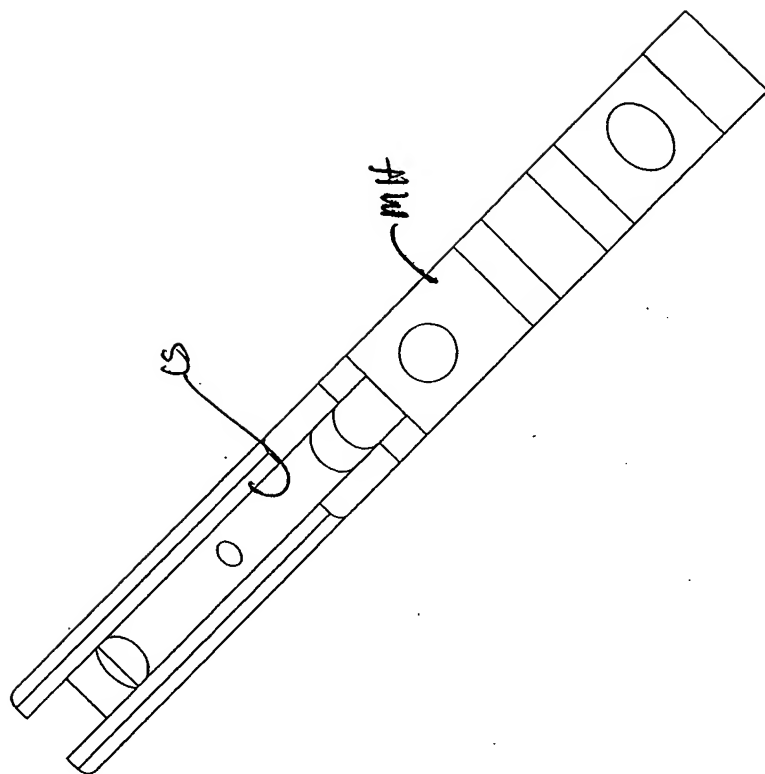


FIG. 16ZV

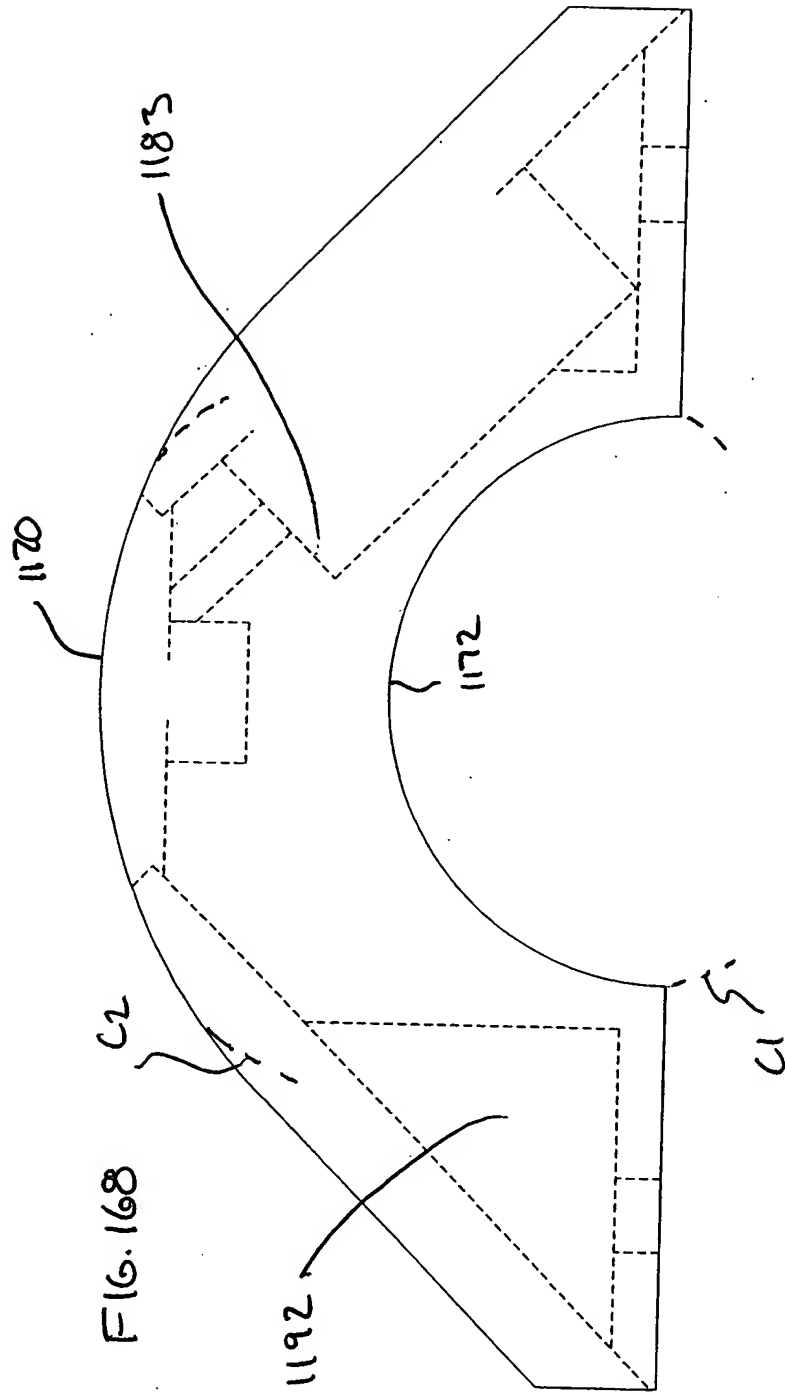


FIG. 168

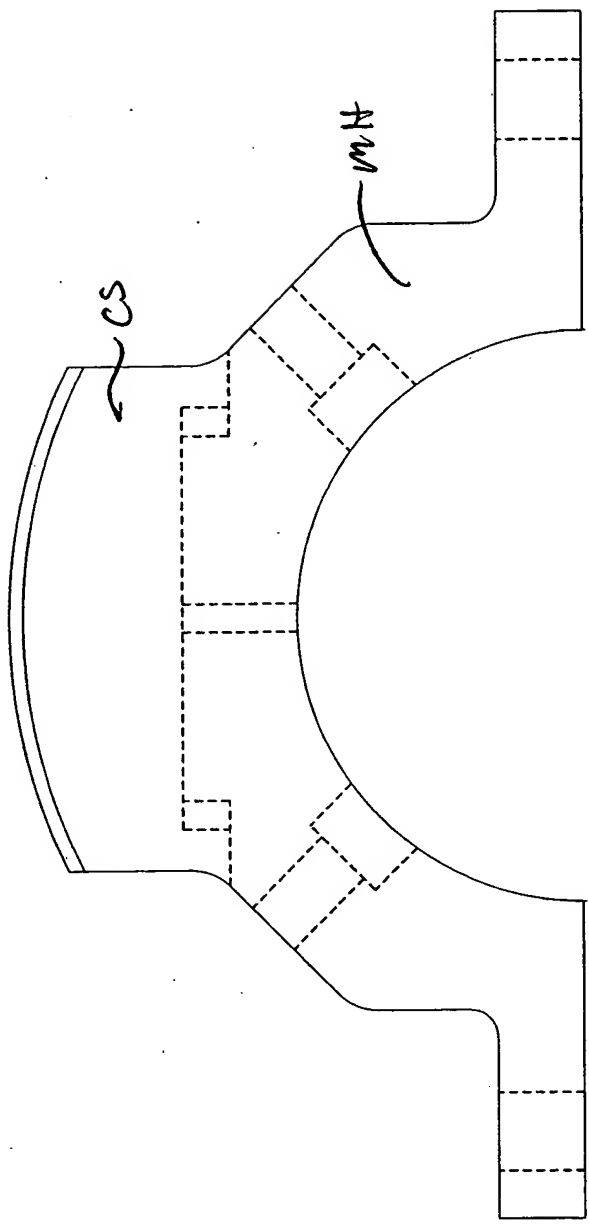
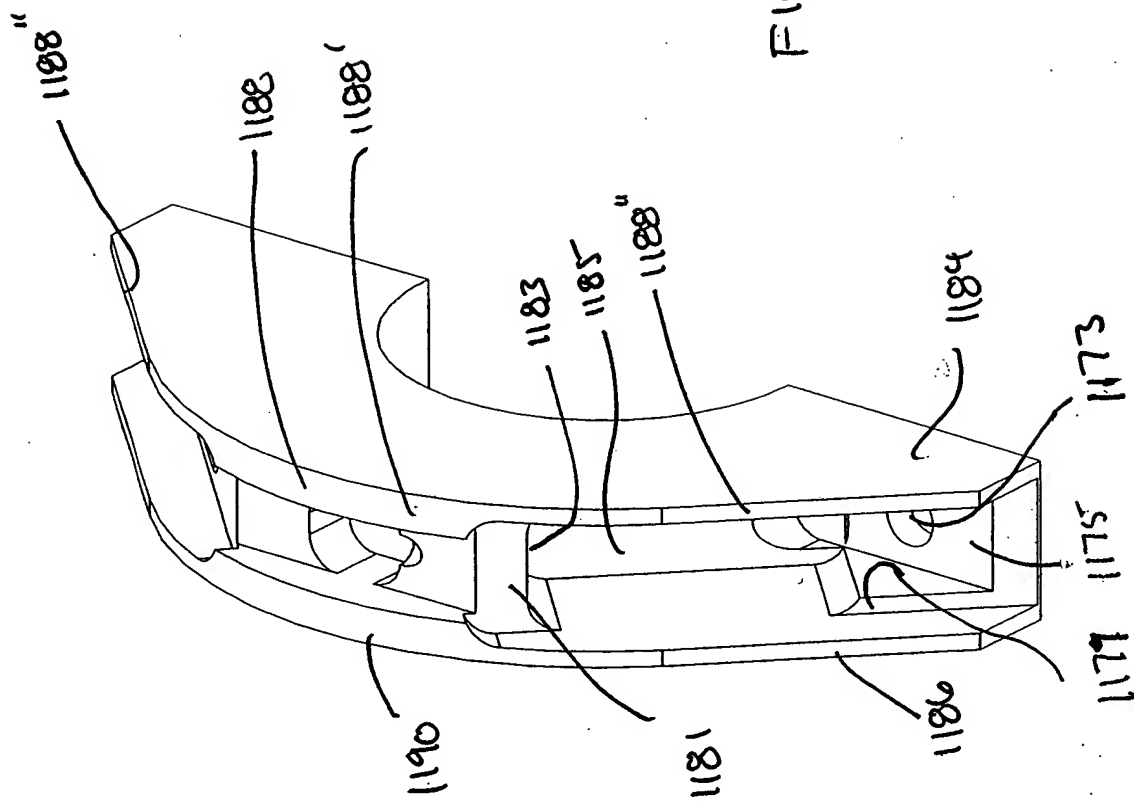


FIG. 16814



F16-169

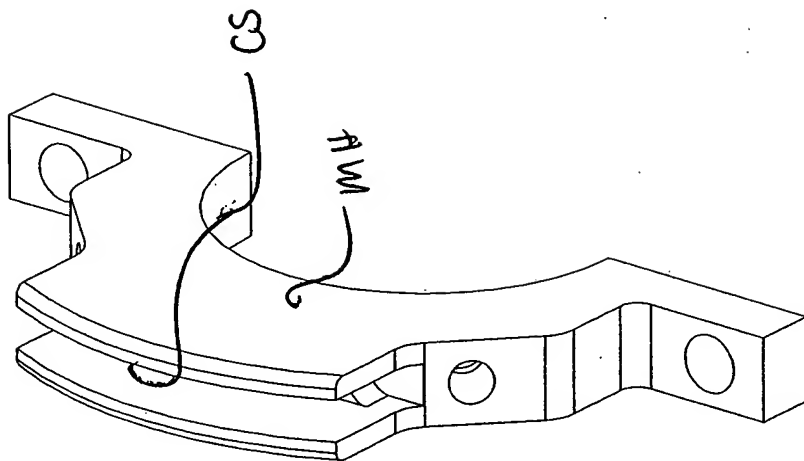
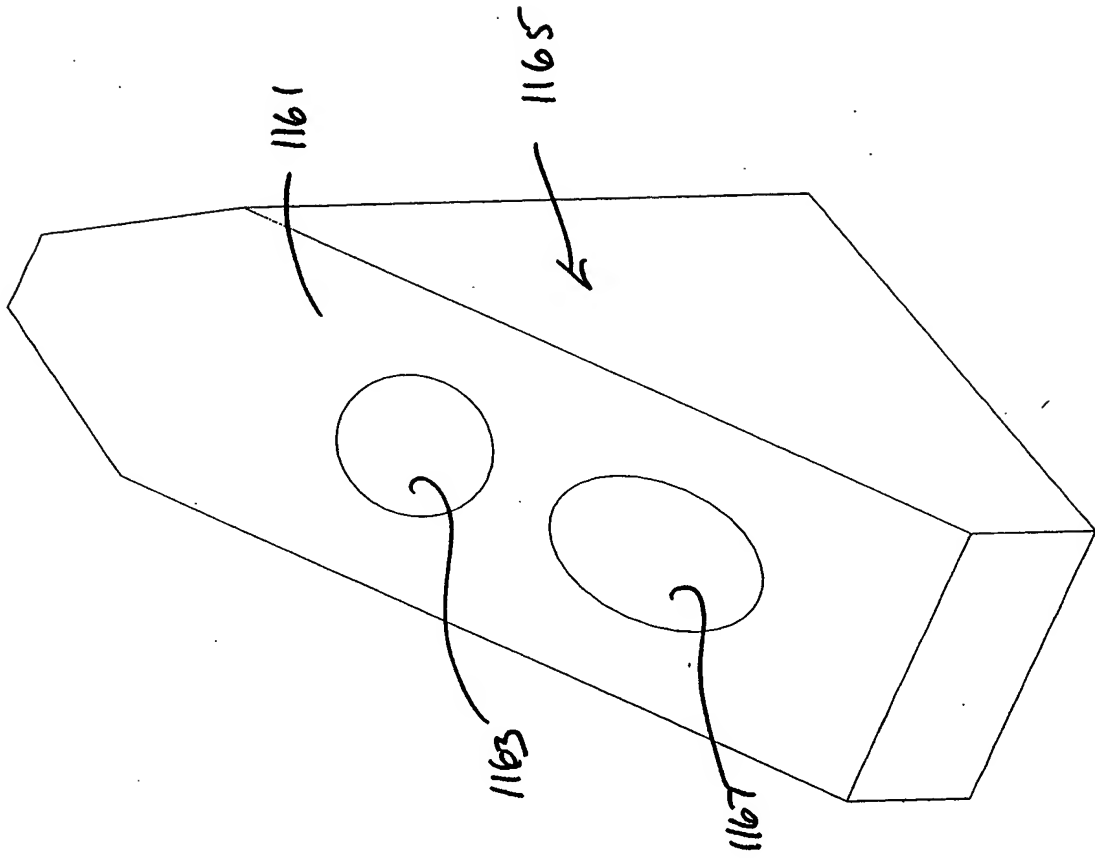


FIG. 169A

FIG. 170



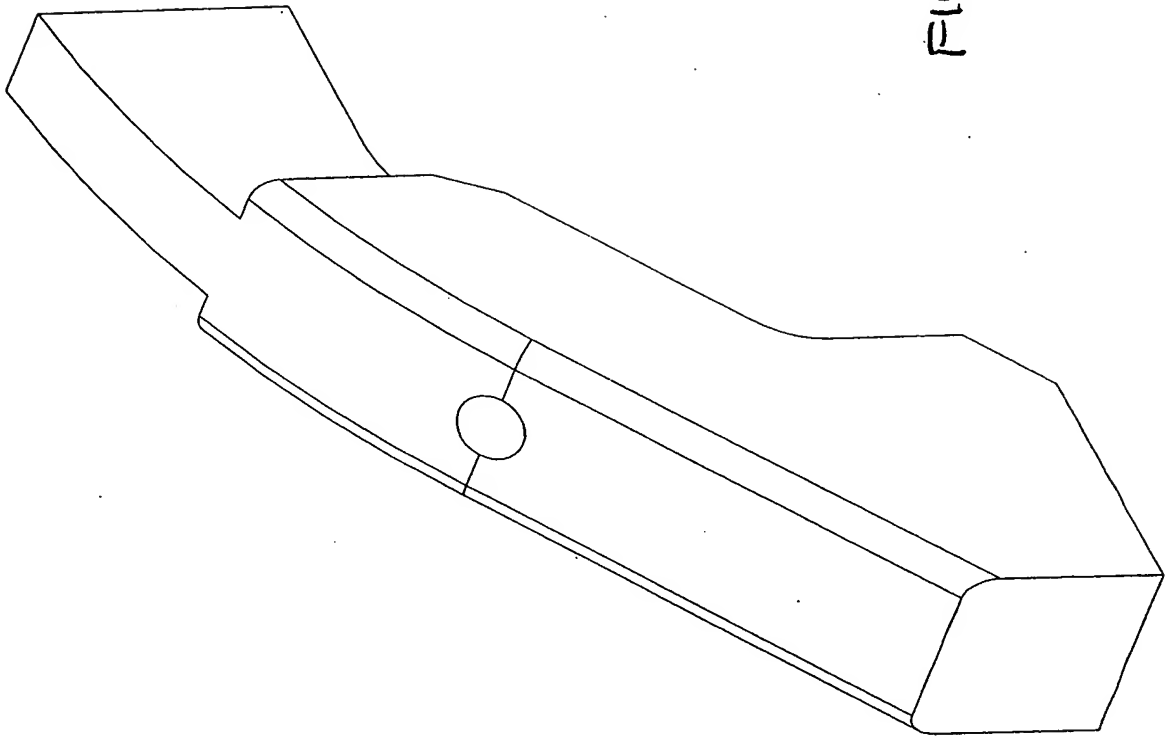
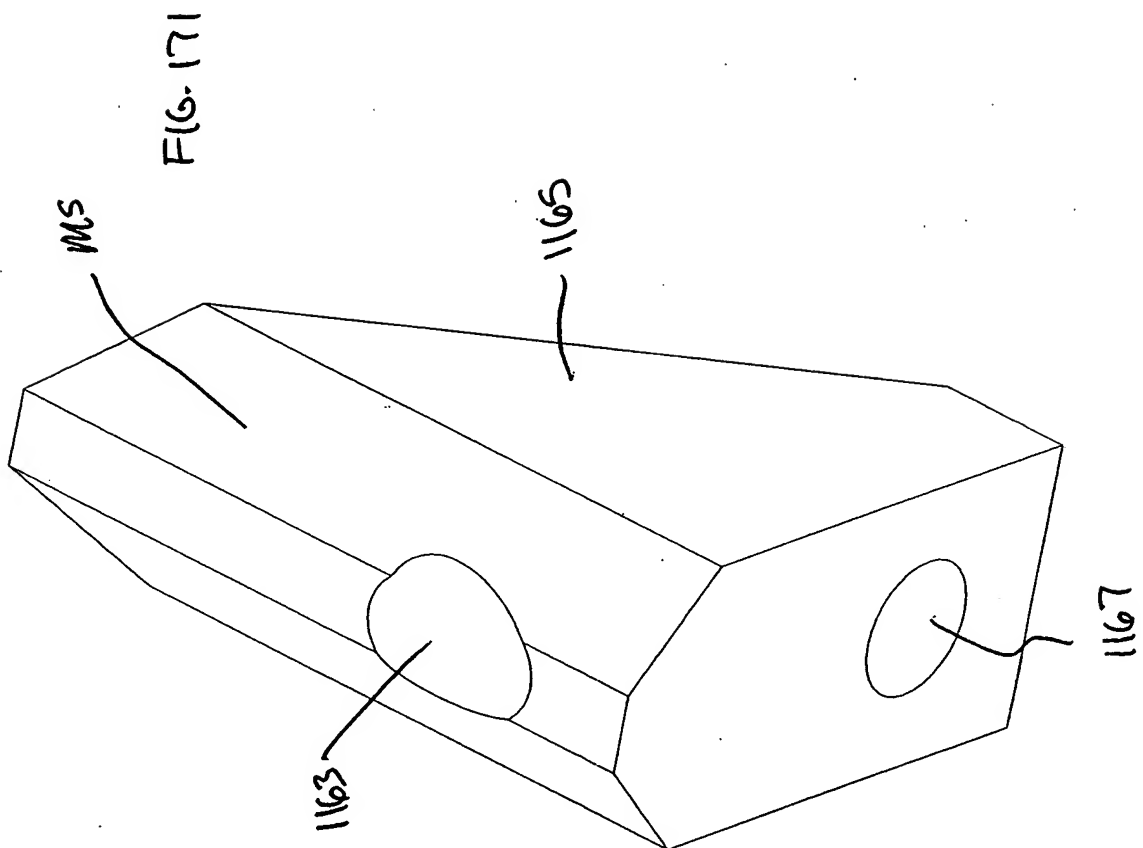


FIG. 170A



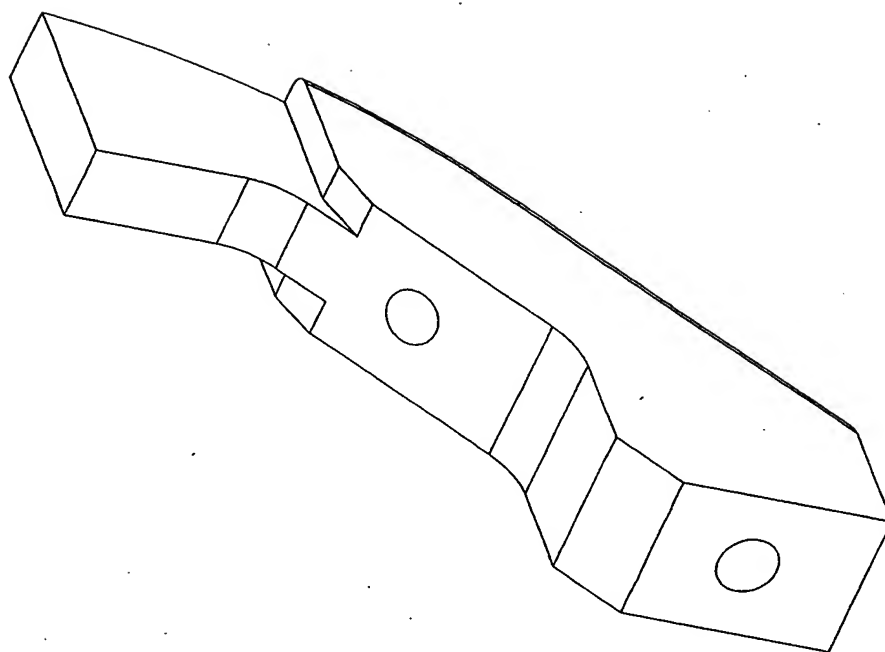


FIG. 171A

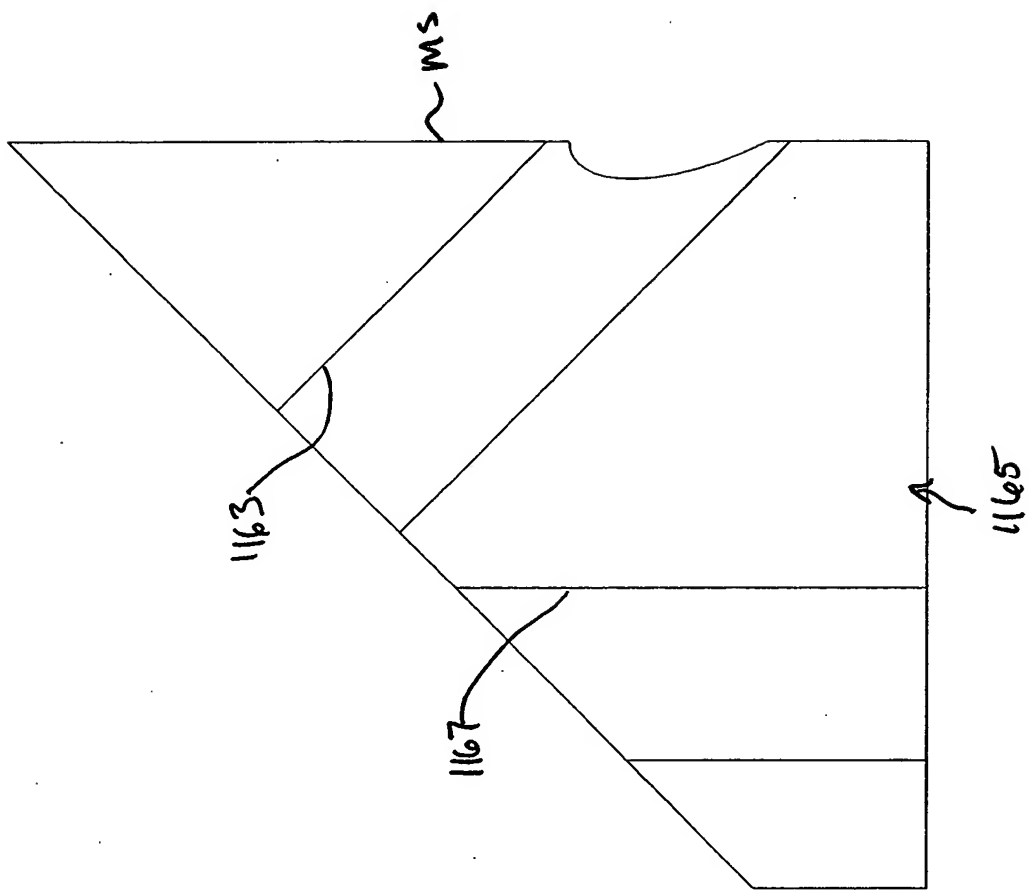


FIG. 172

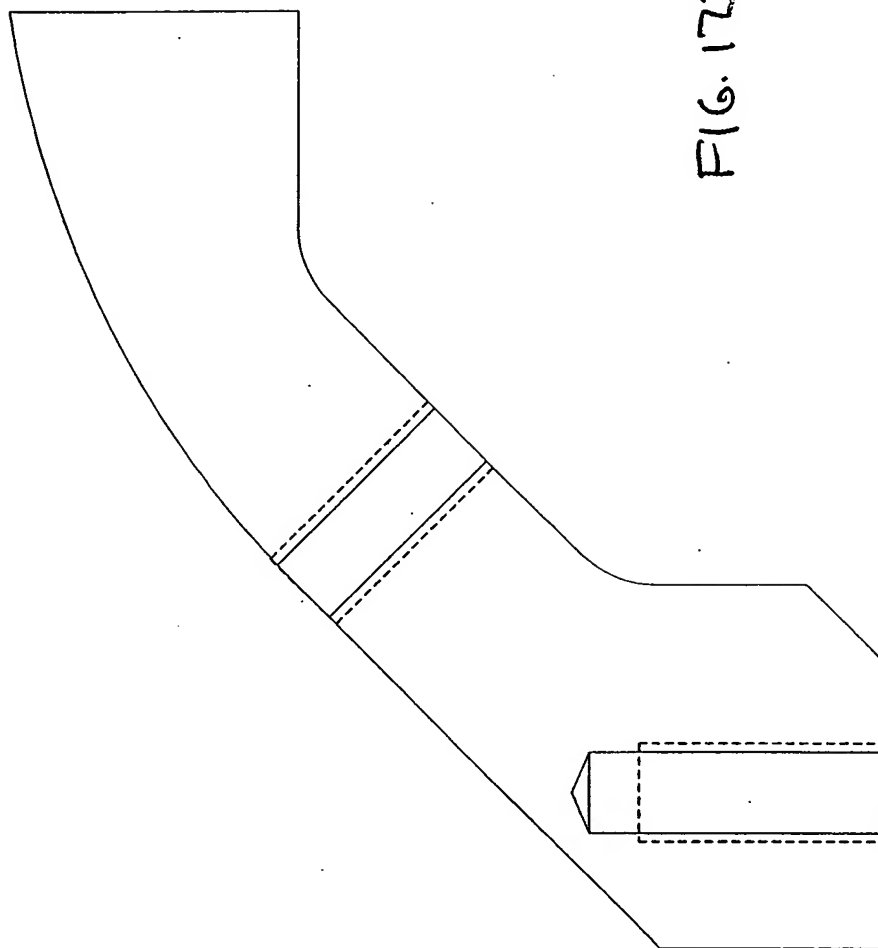
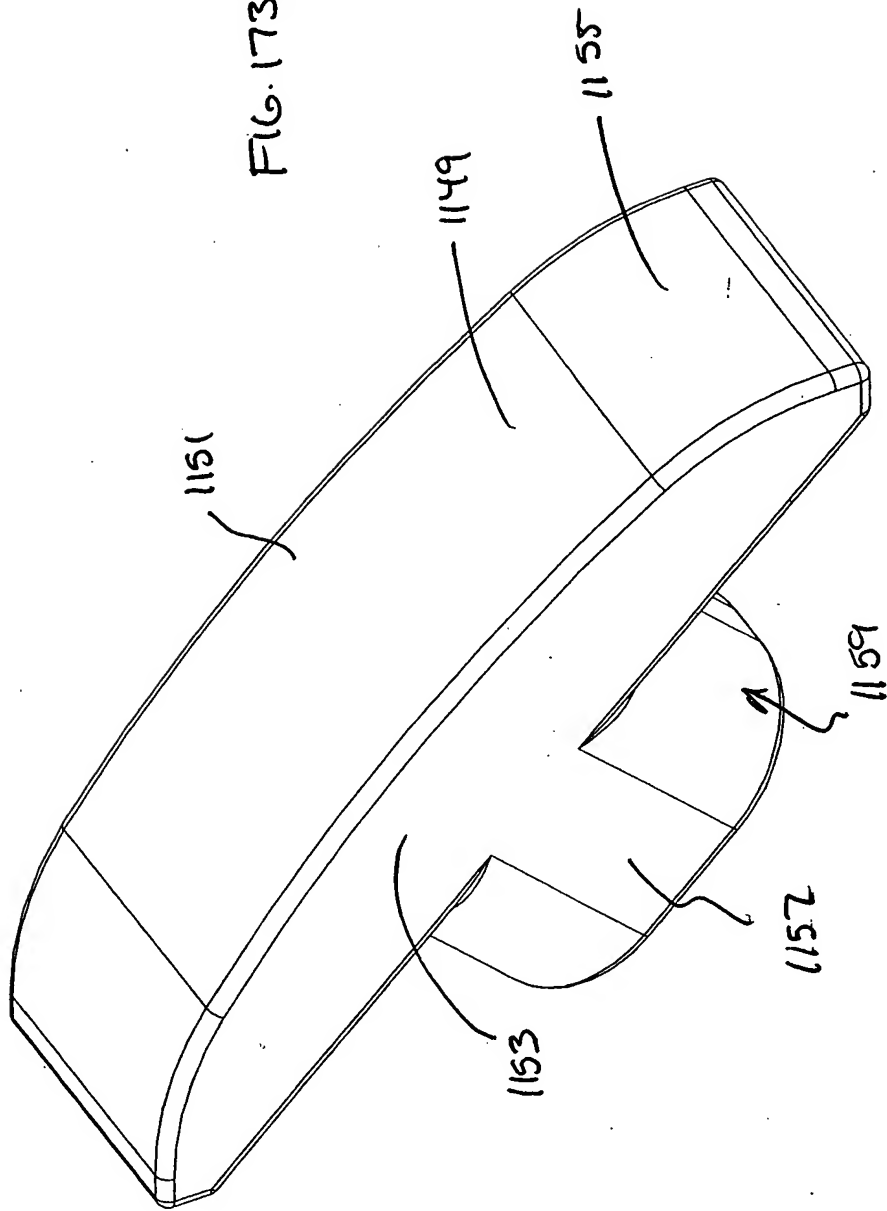


FIG. 172A

FIG. 173A



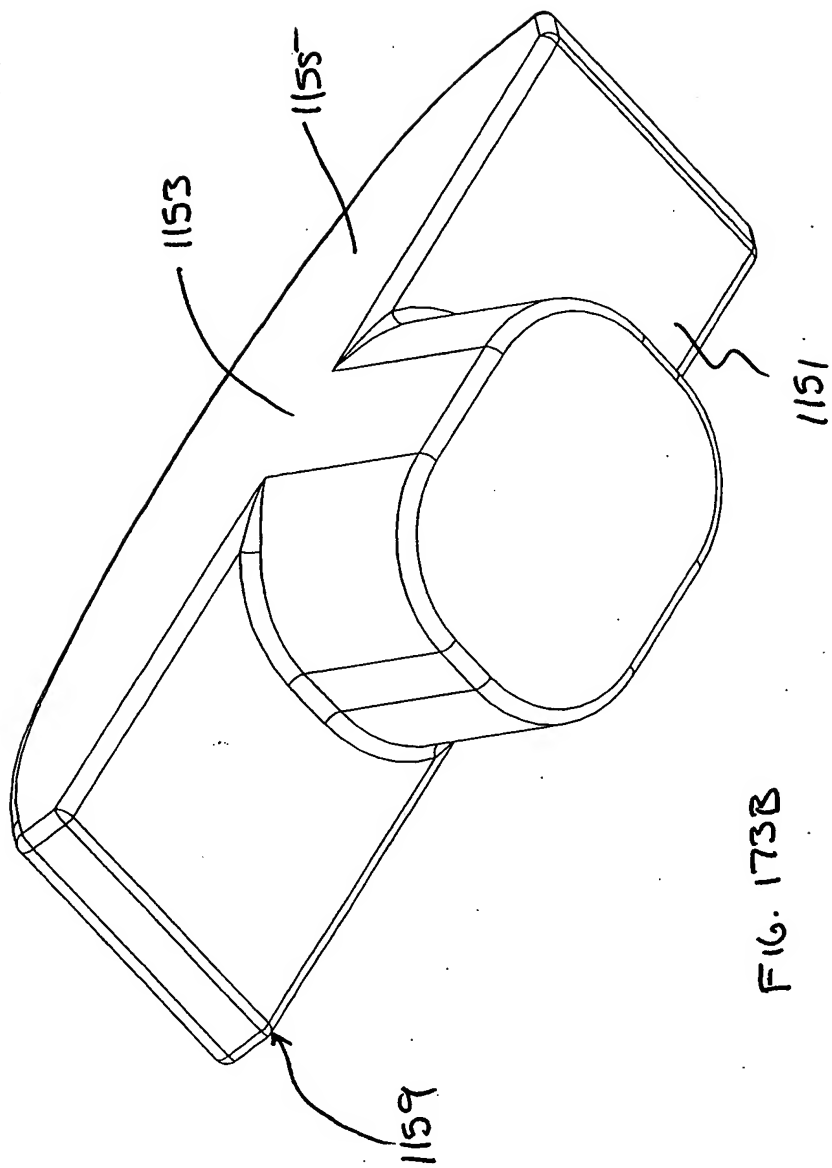


FIG. 173B

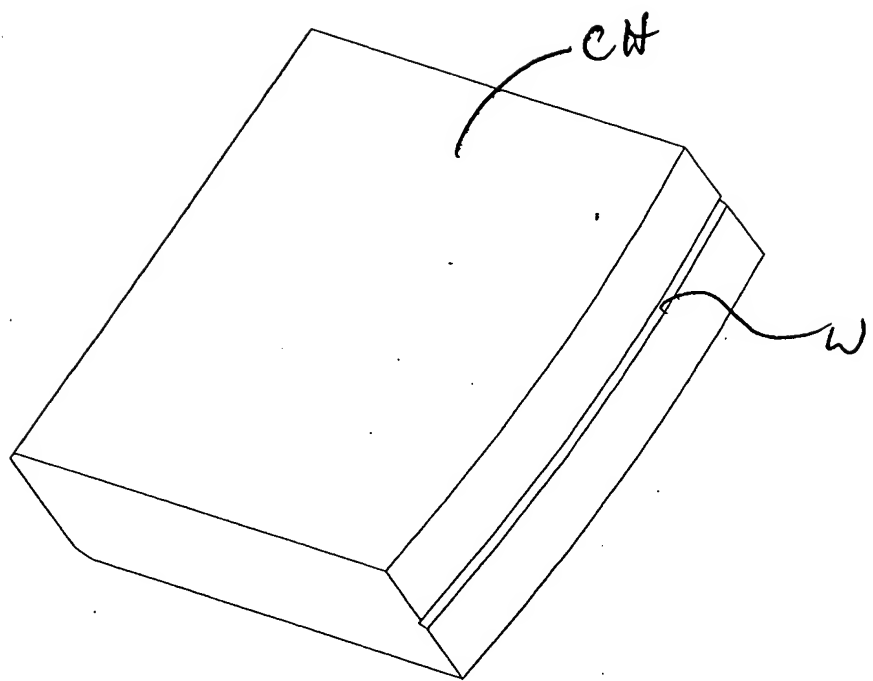


FIG. 173C

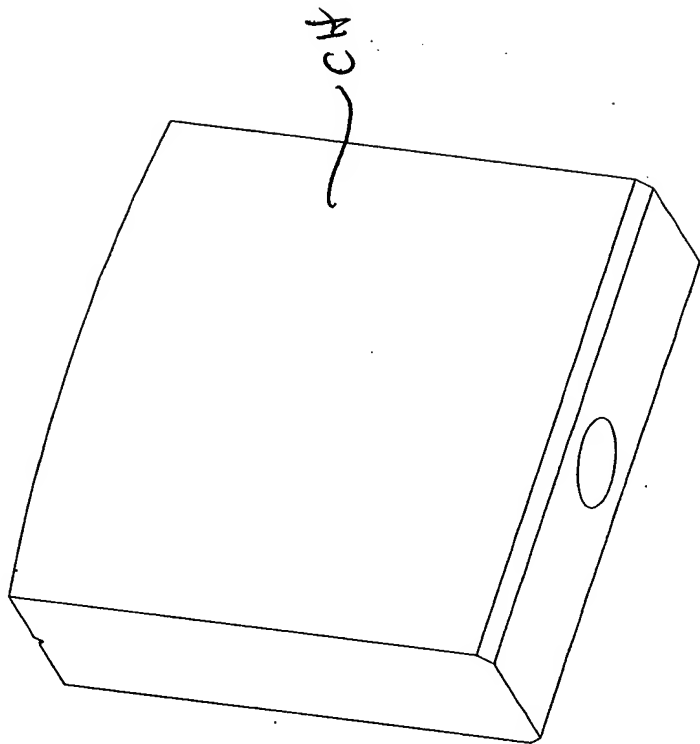
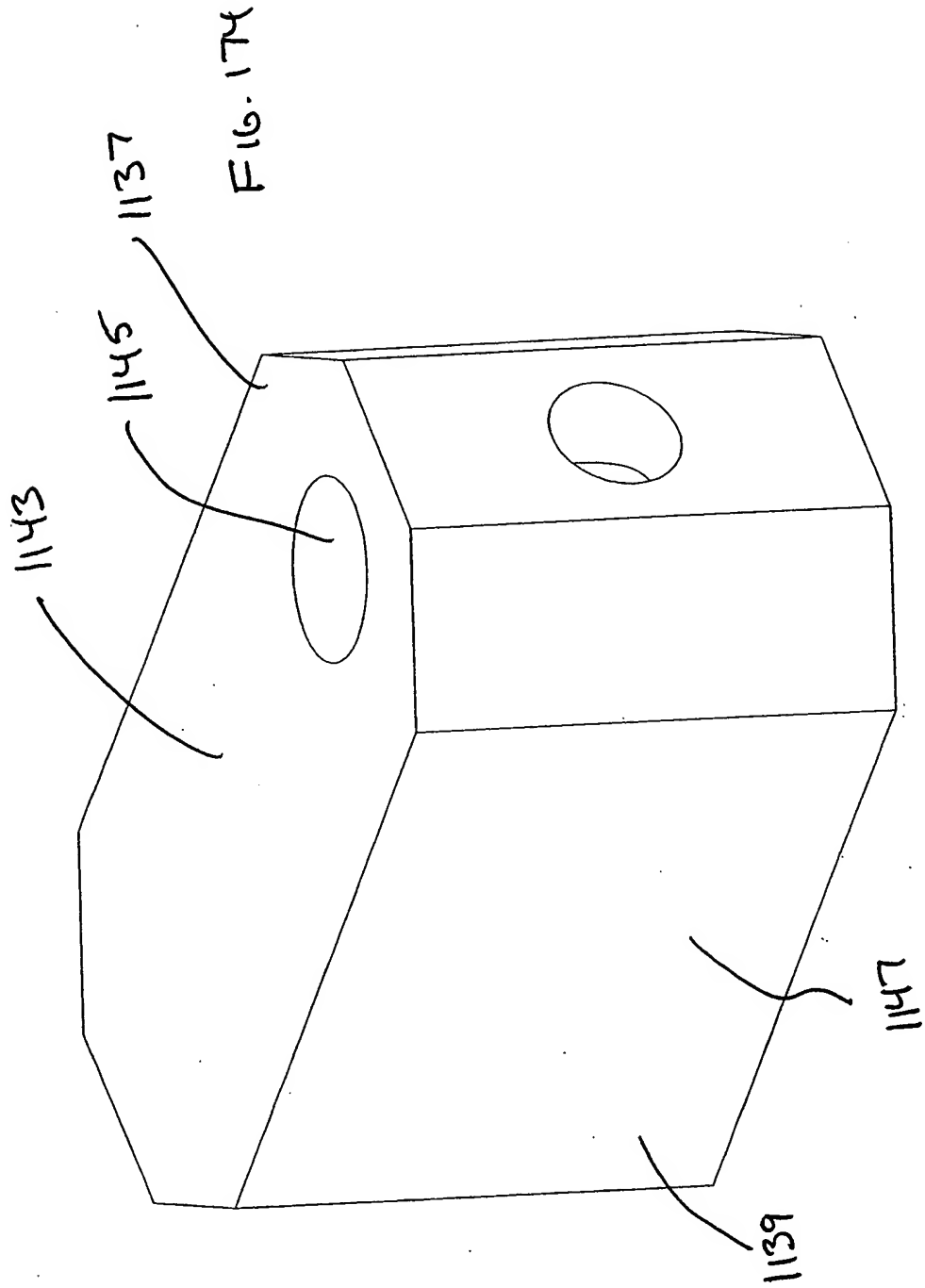


FIG. 173D



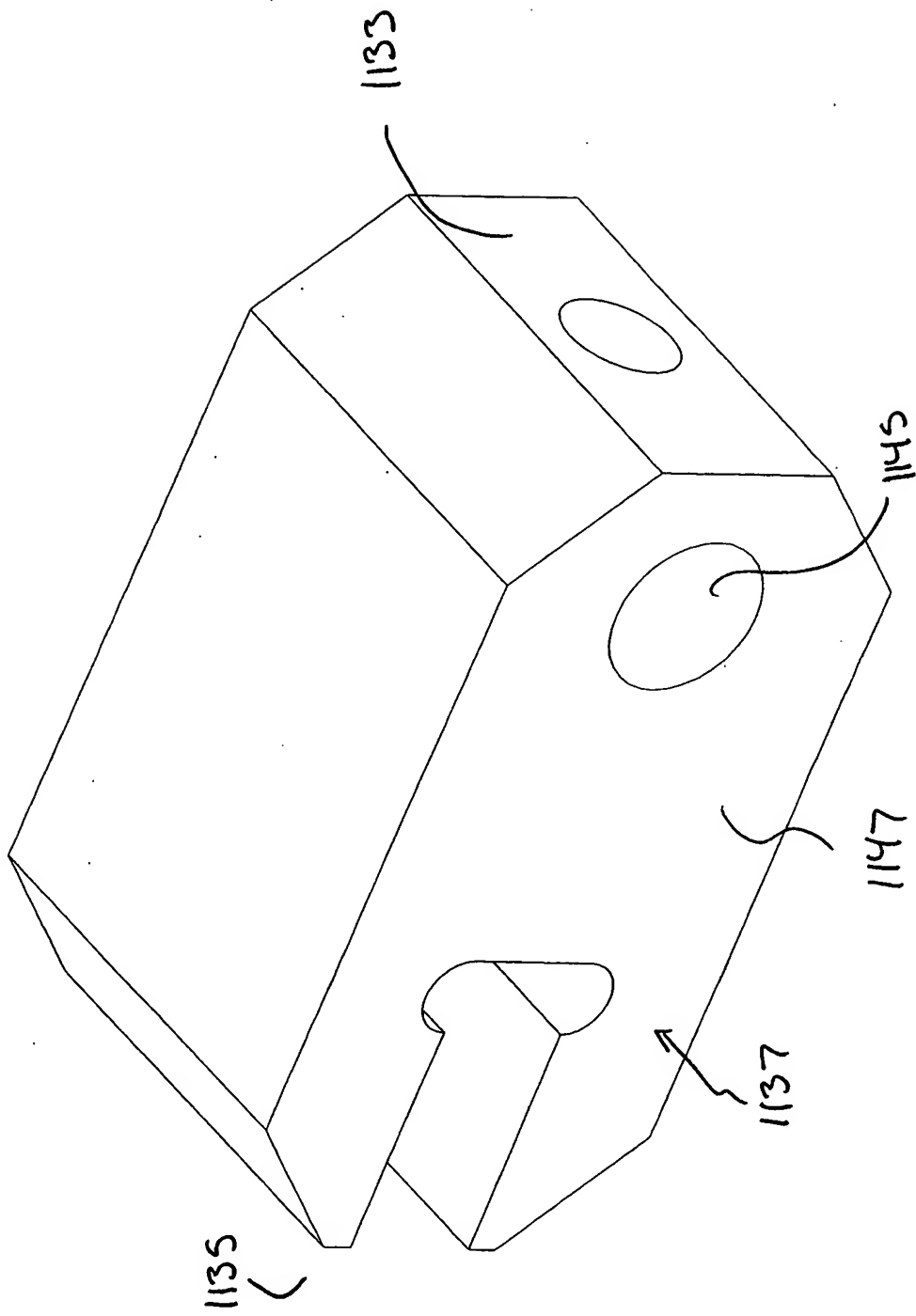
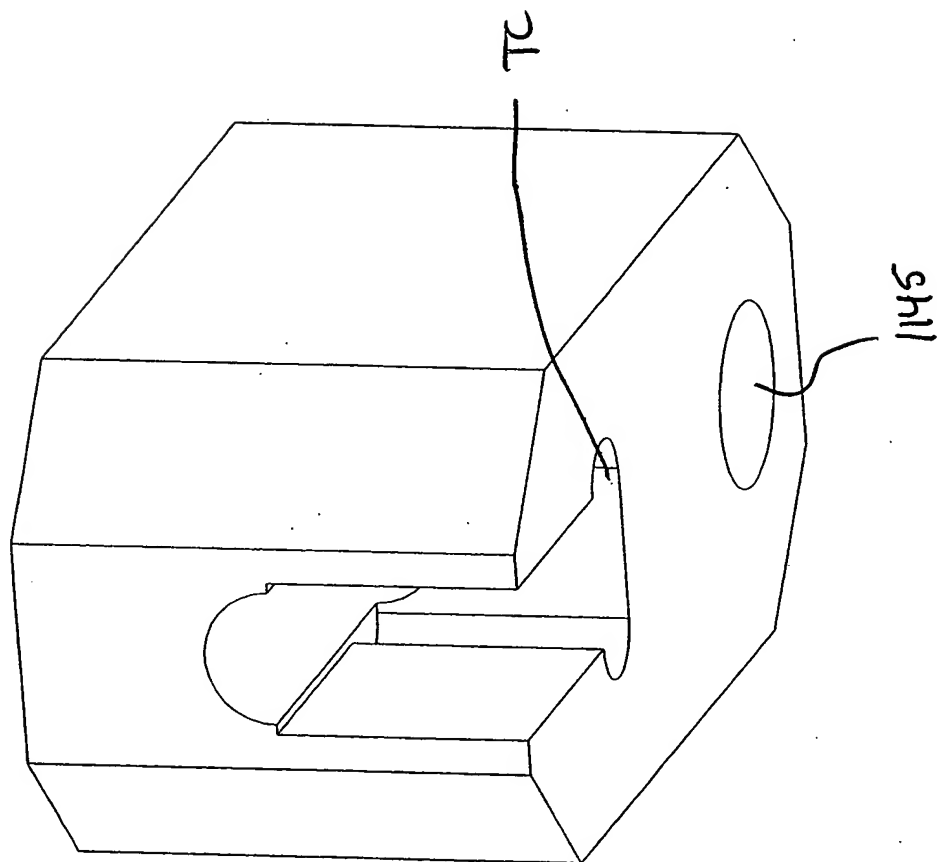


FIG. 175

FIG. 17C



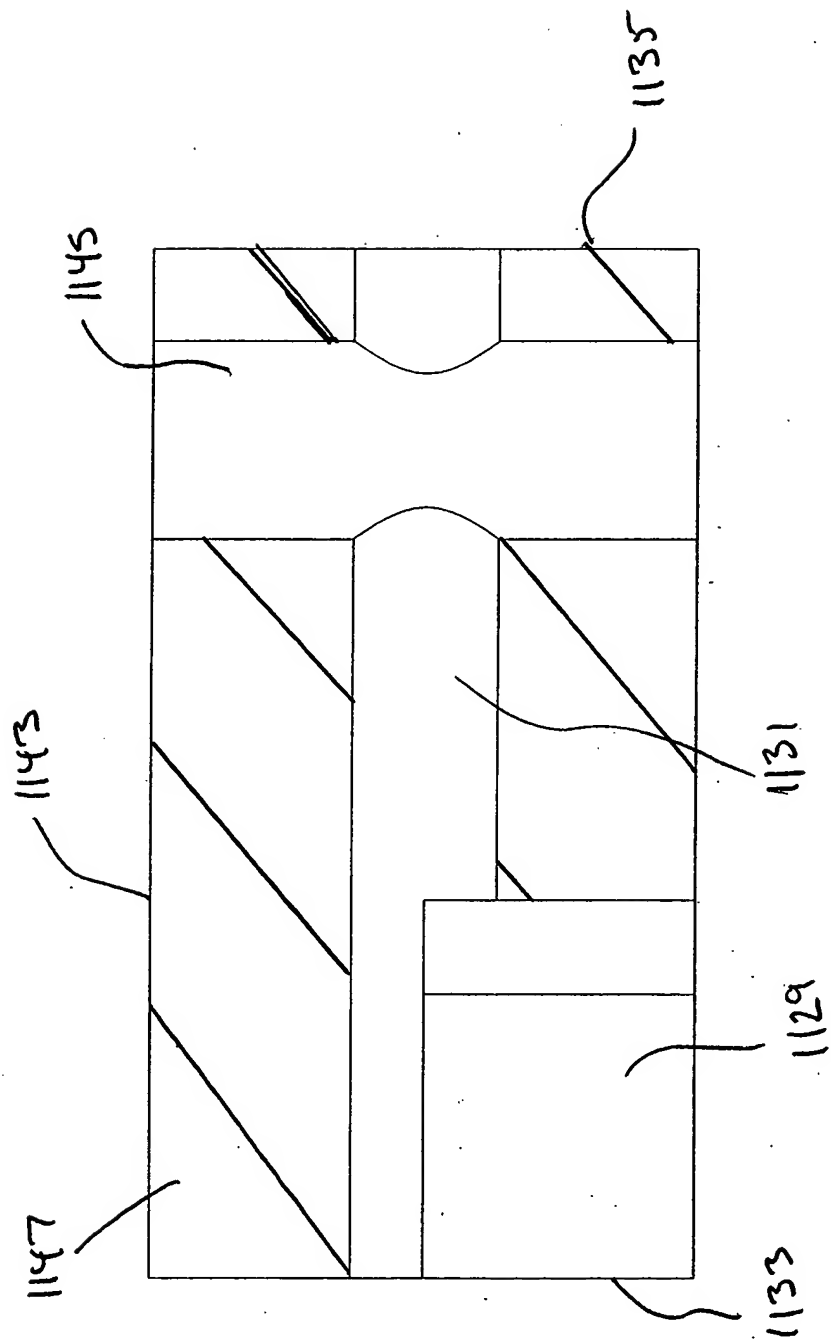


FIG. 177

1113(III)

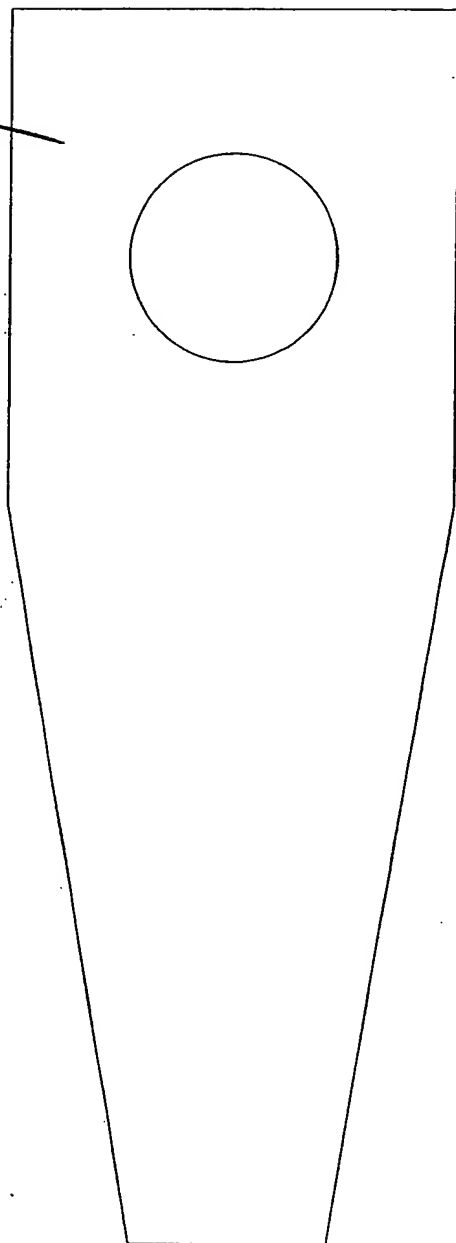


FIG. 178

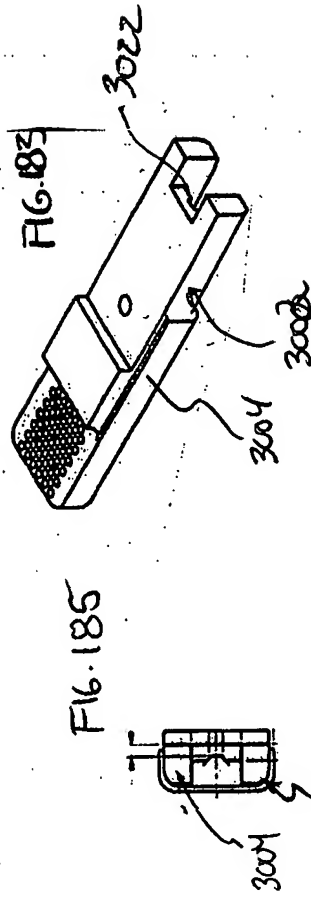
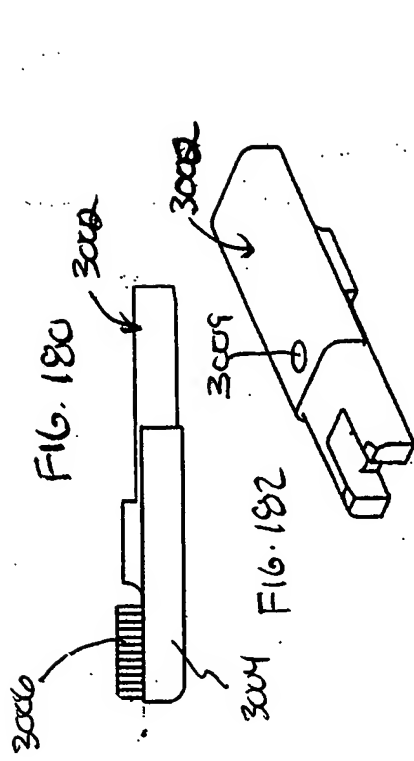
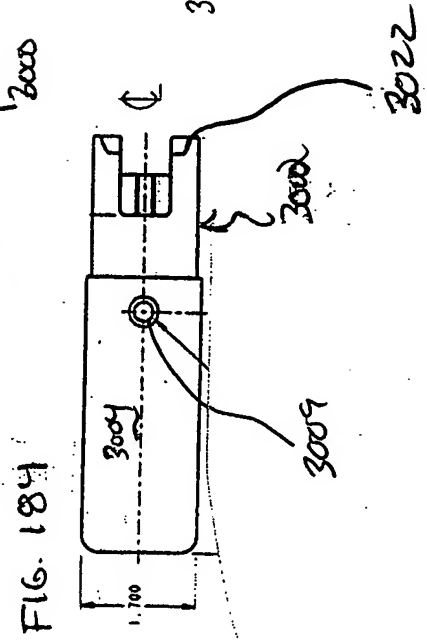
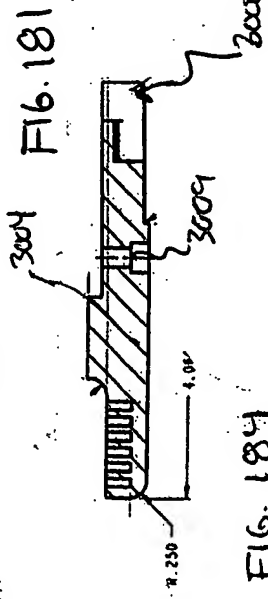
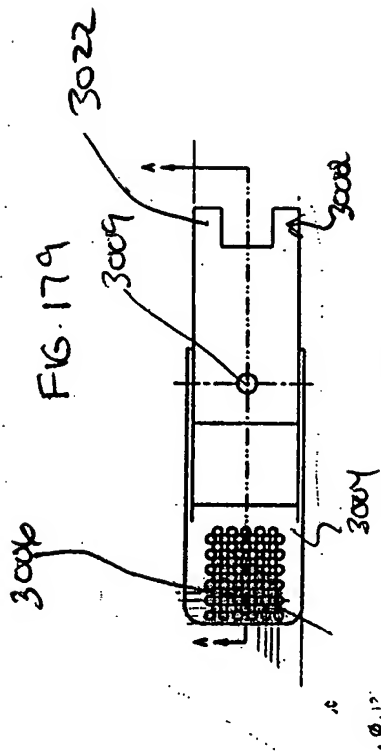


FIG. 186

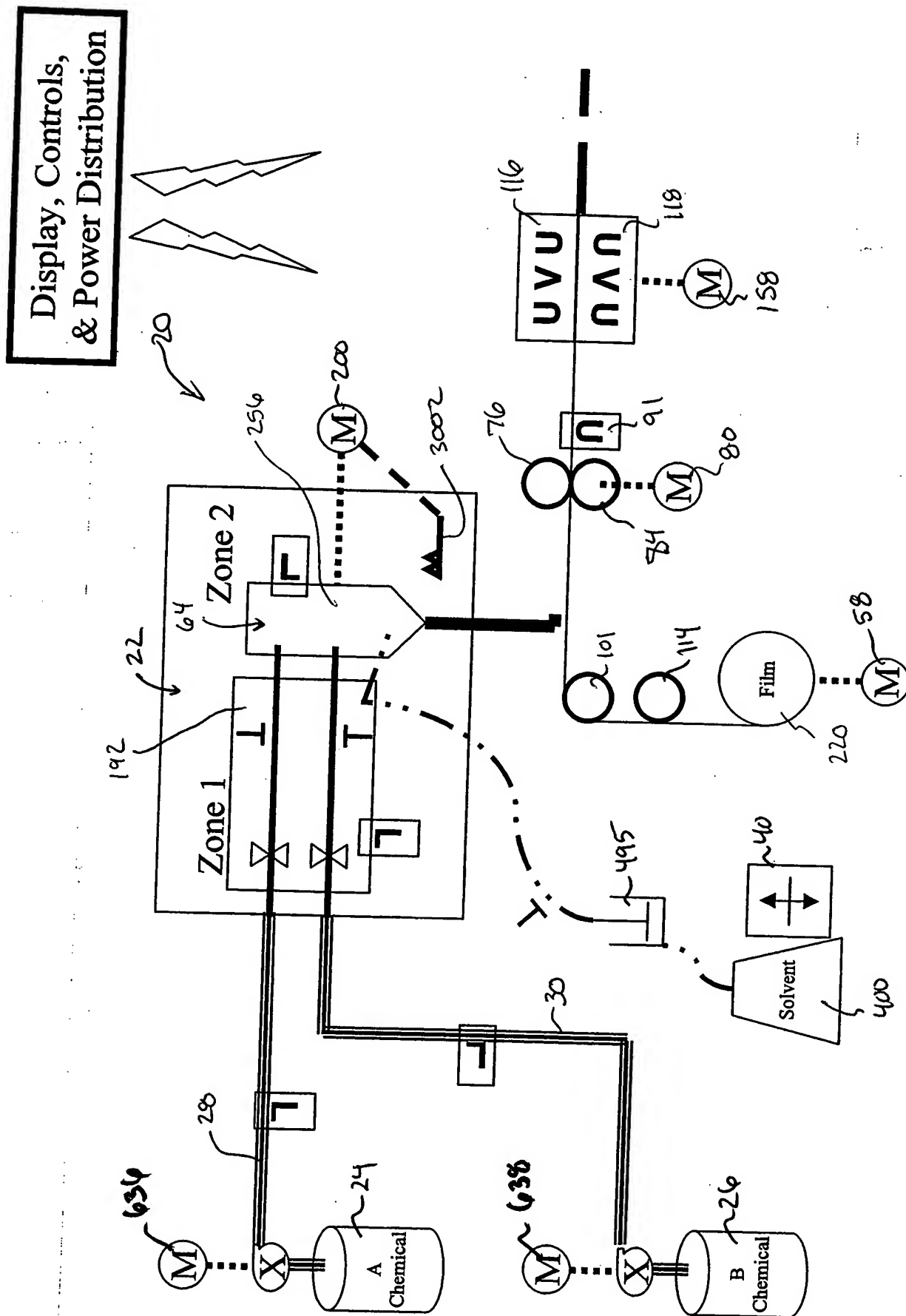





Fig. 186A

Legend


 = Motor

 = Linkage

 = Pump

 = Pump Shaft/Hose

 = Heating element (all orientations)

 = Filter

 = Pressure Transducer (all orientations)

 = Tip Cleaning Brush


 = Solvent Pump

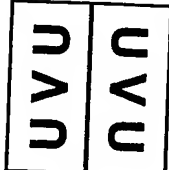
 = Level Sensor

 = Mixing Module +

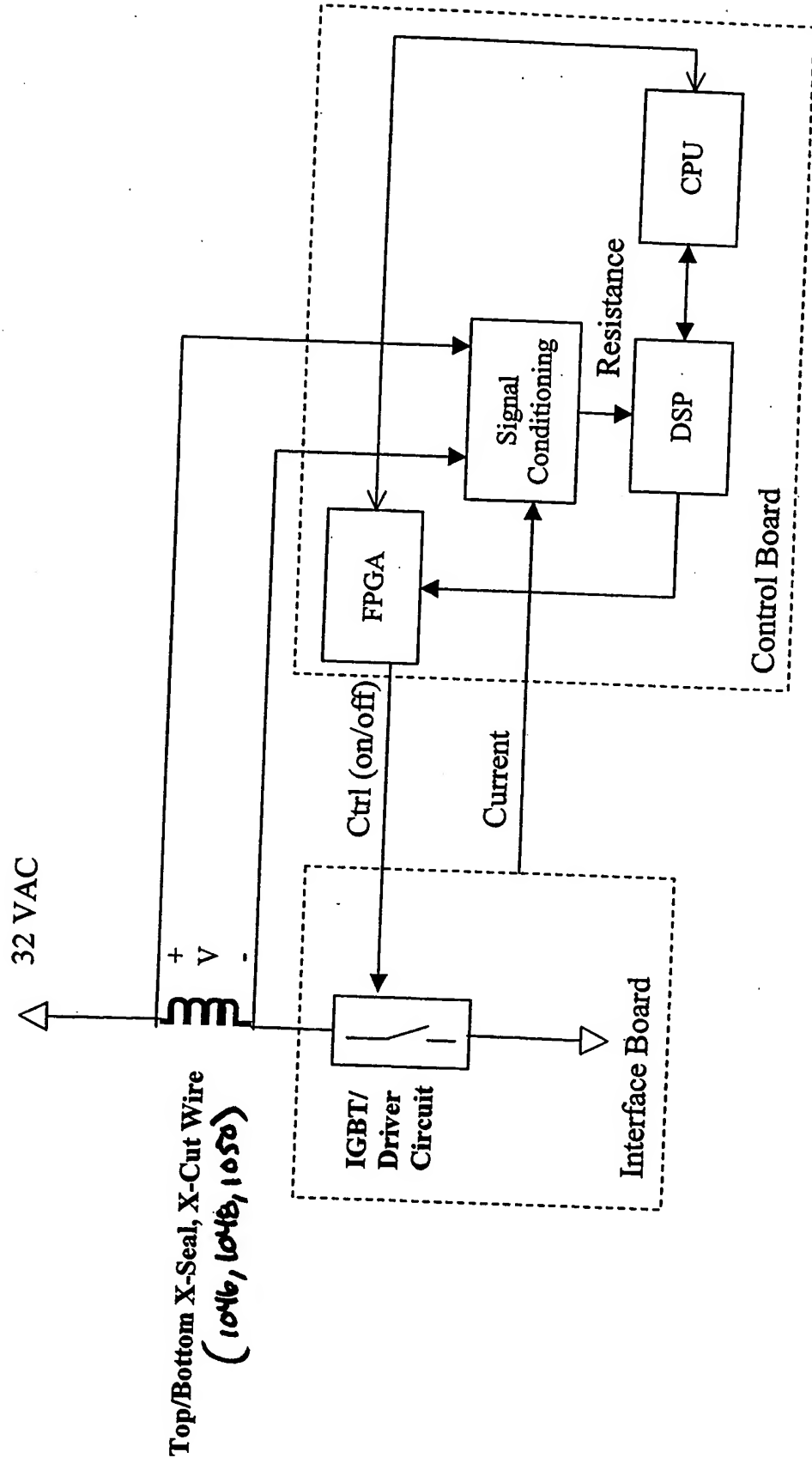
 = Idle Roller

 = Nip Rollers

 = Edge Seal Wire

 = Jaw Assembly
(X-seal, X-cut,
X-seal)

Top/Bottom X-Seal, X-cut



Edge Seal

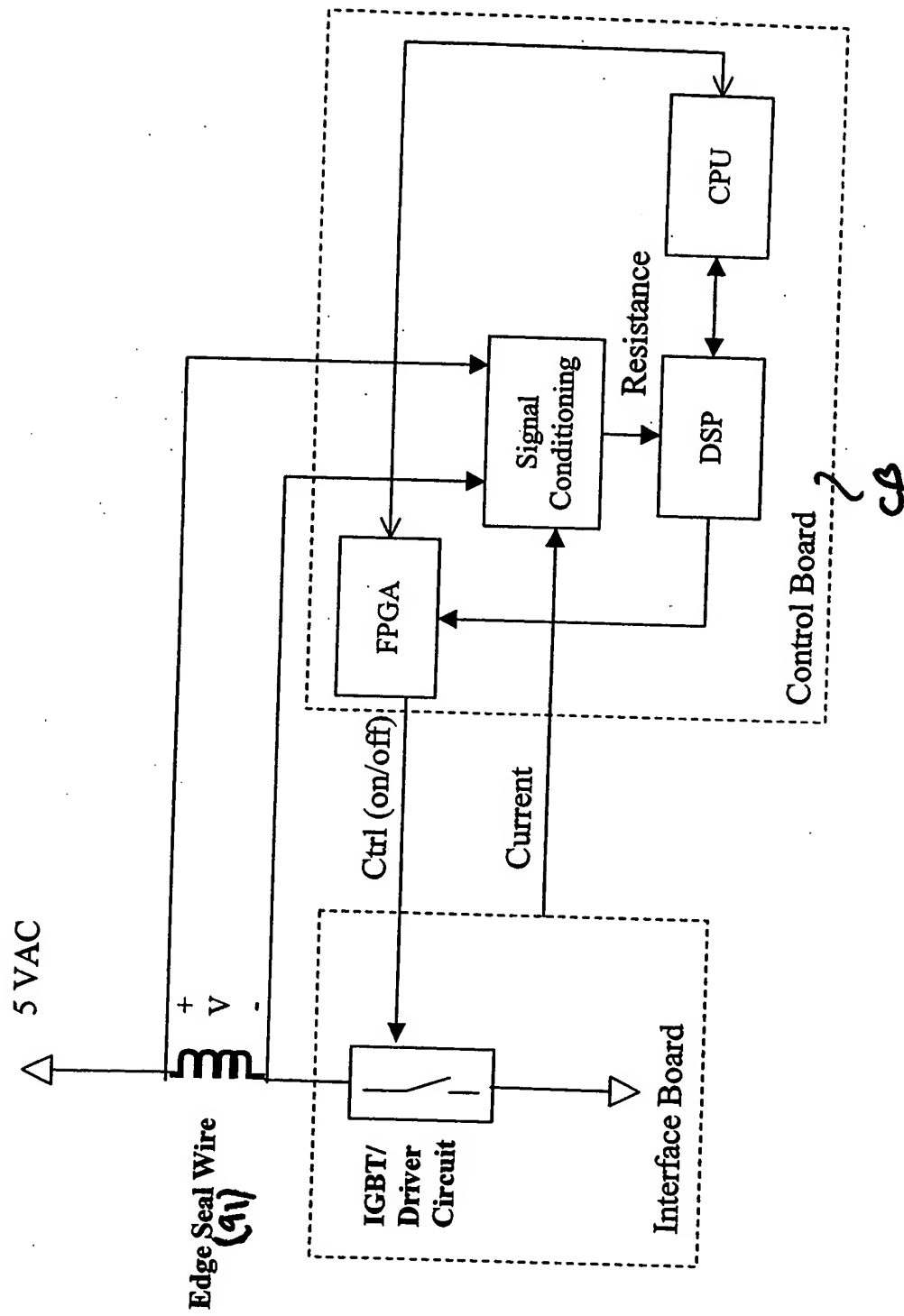


FIG. 108

Moving Jaw

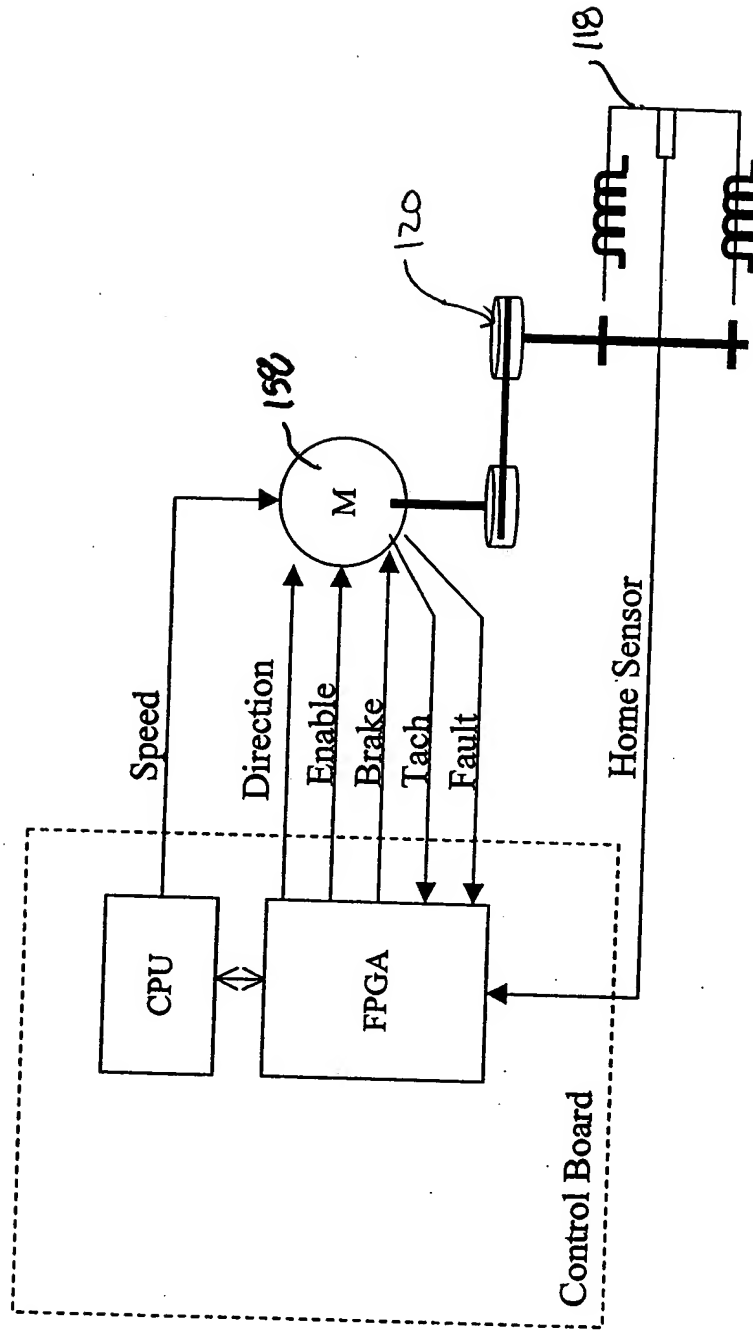


FIG. 189

Chemical Dispensing/Tip Cleaning

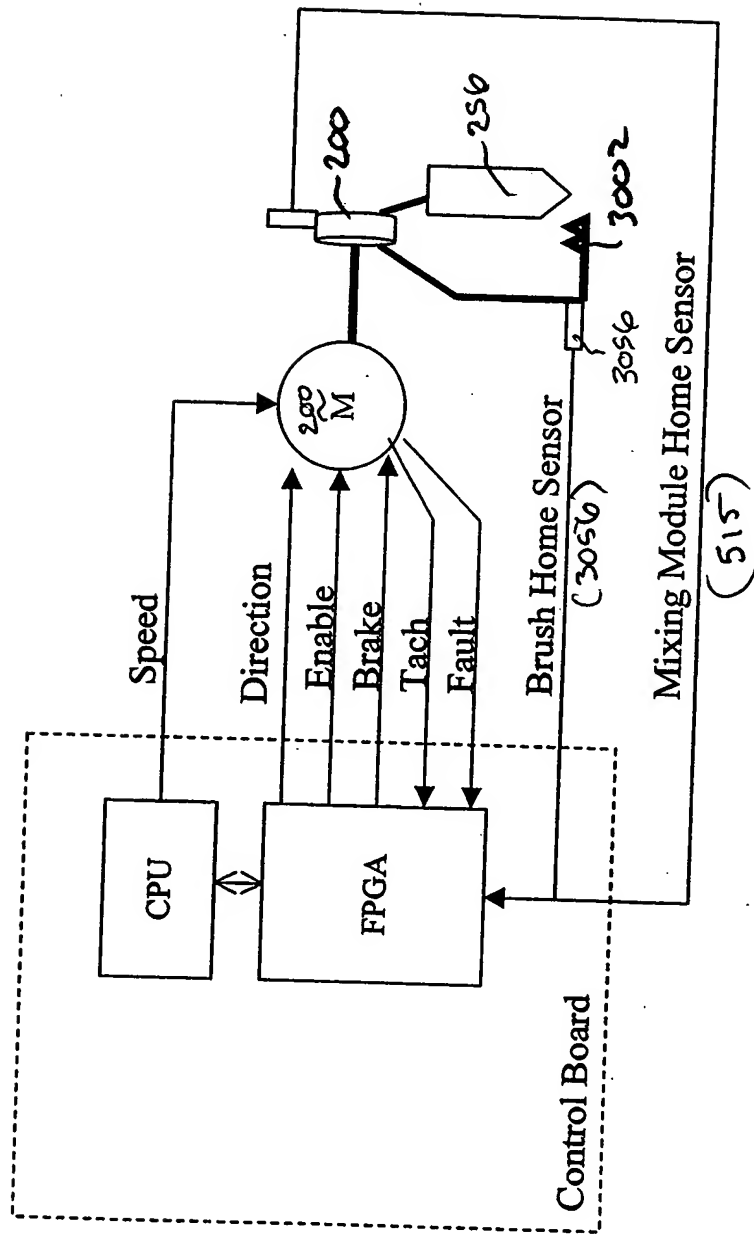


FIG. 190

Film Advance/Tracking

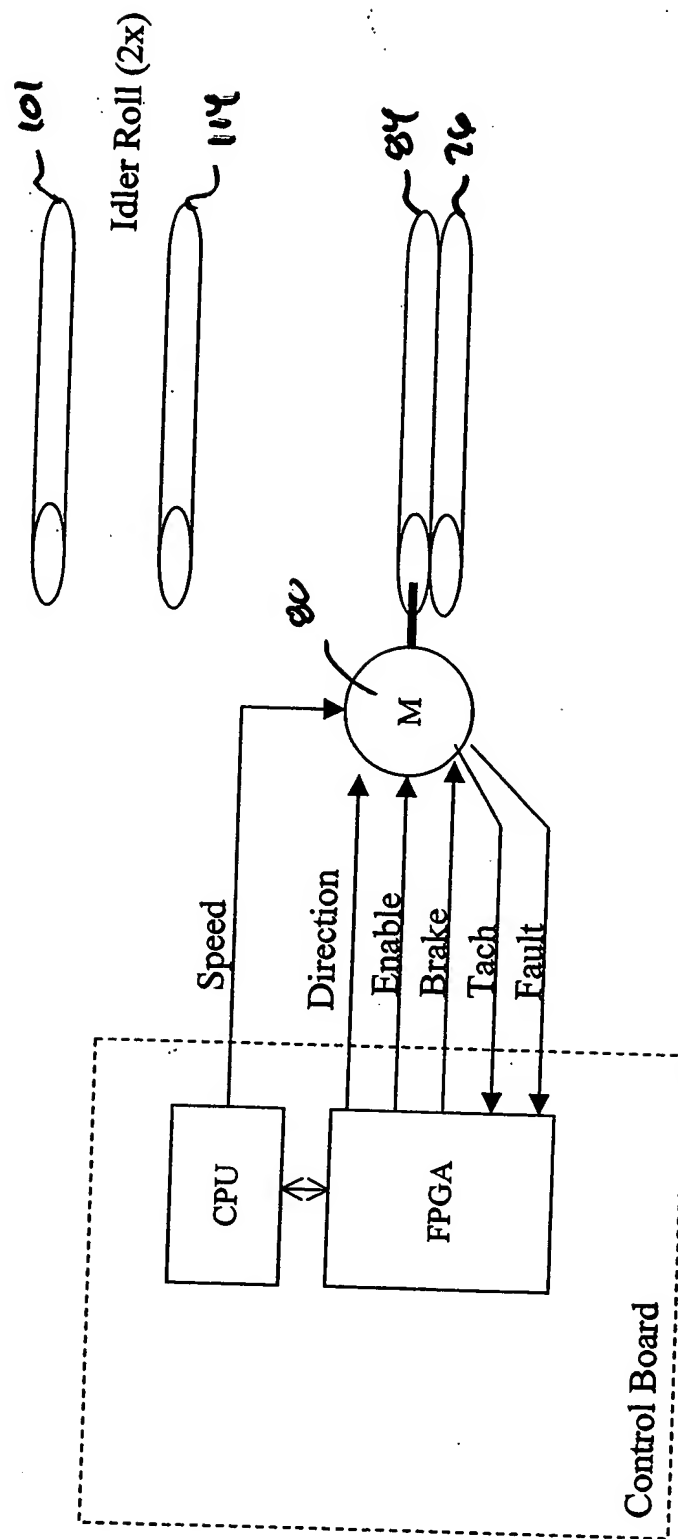


FIG. 191

Film Tension

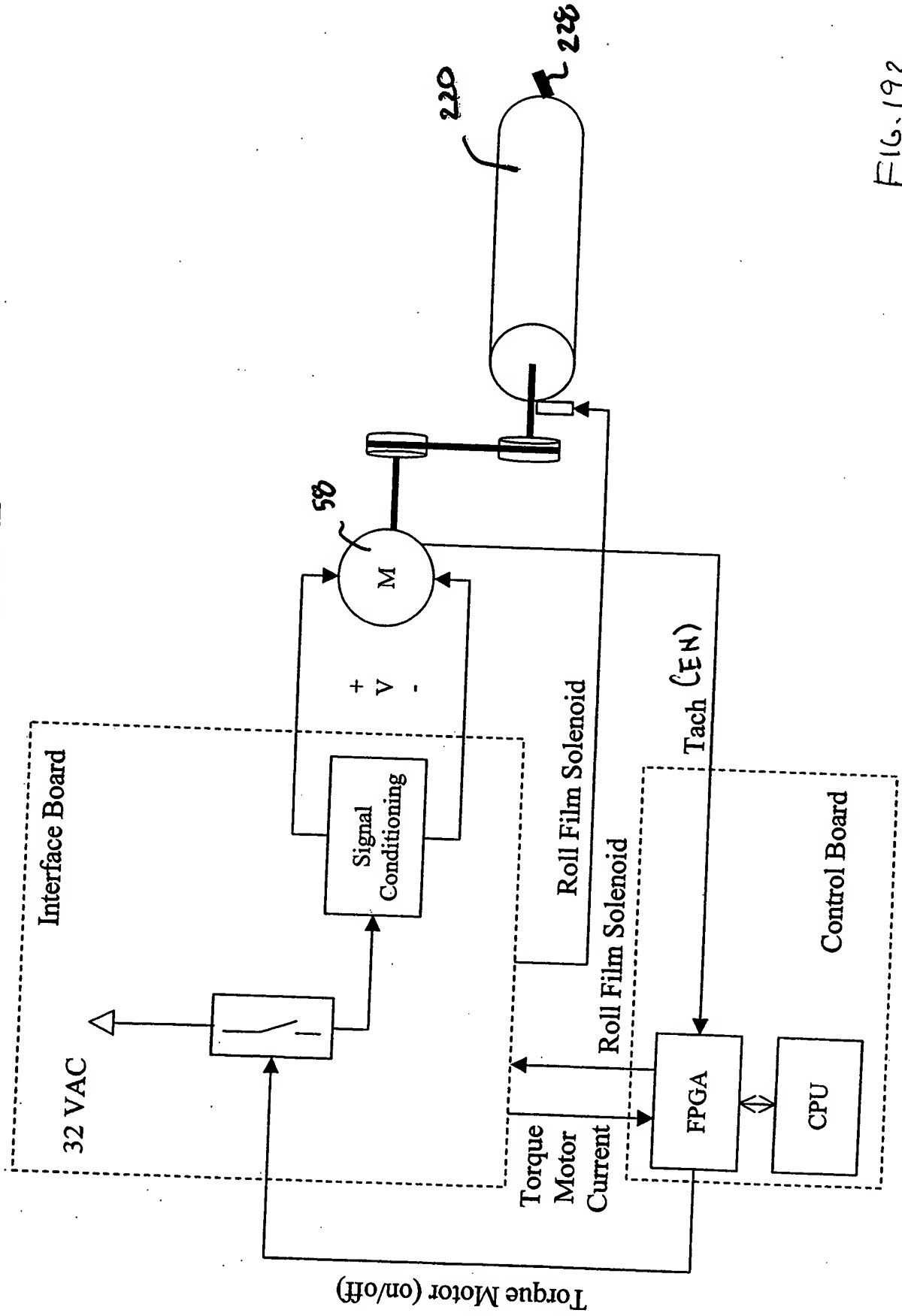


FIG. 192

Chemical Temperature Control (Hoses)

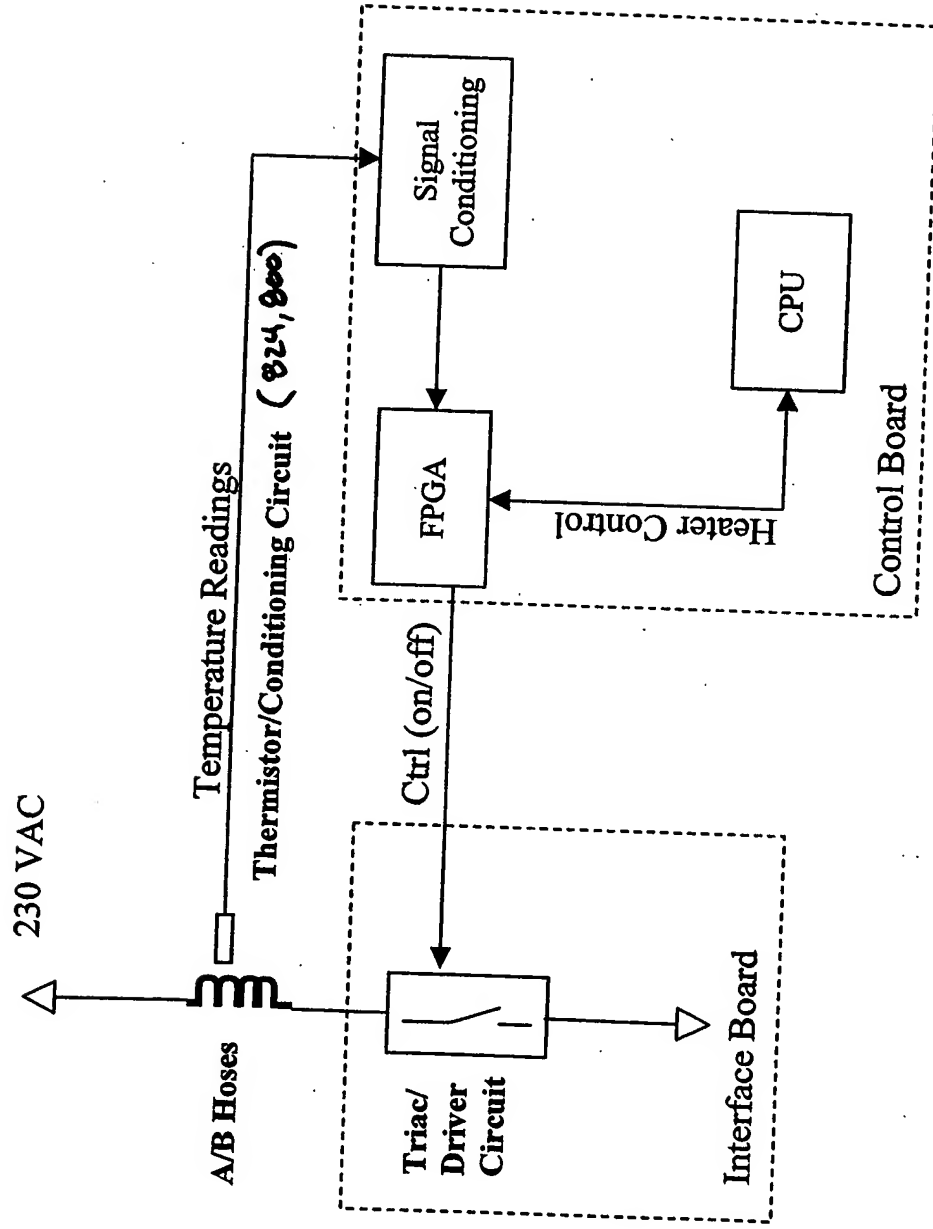


FIG. 193

Chemical Temperature Control (Manifold Zones)

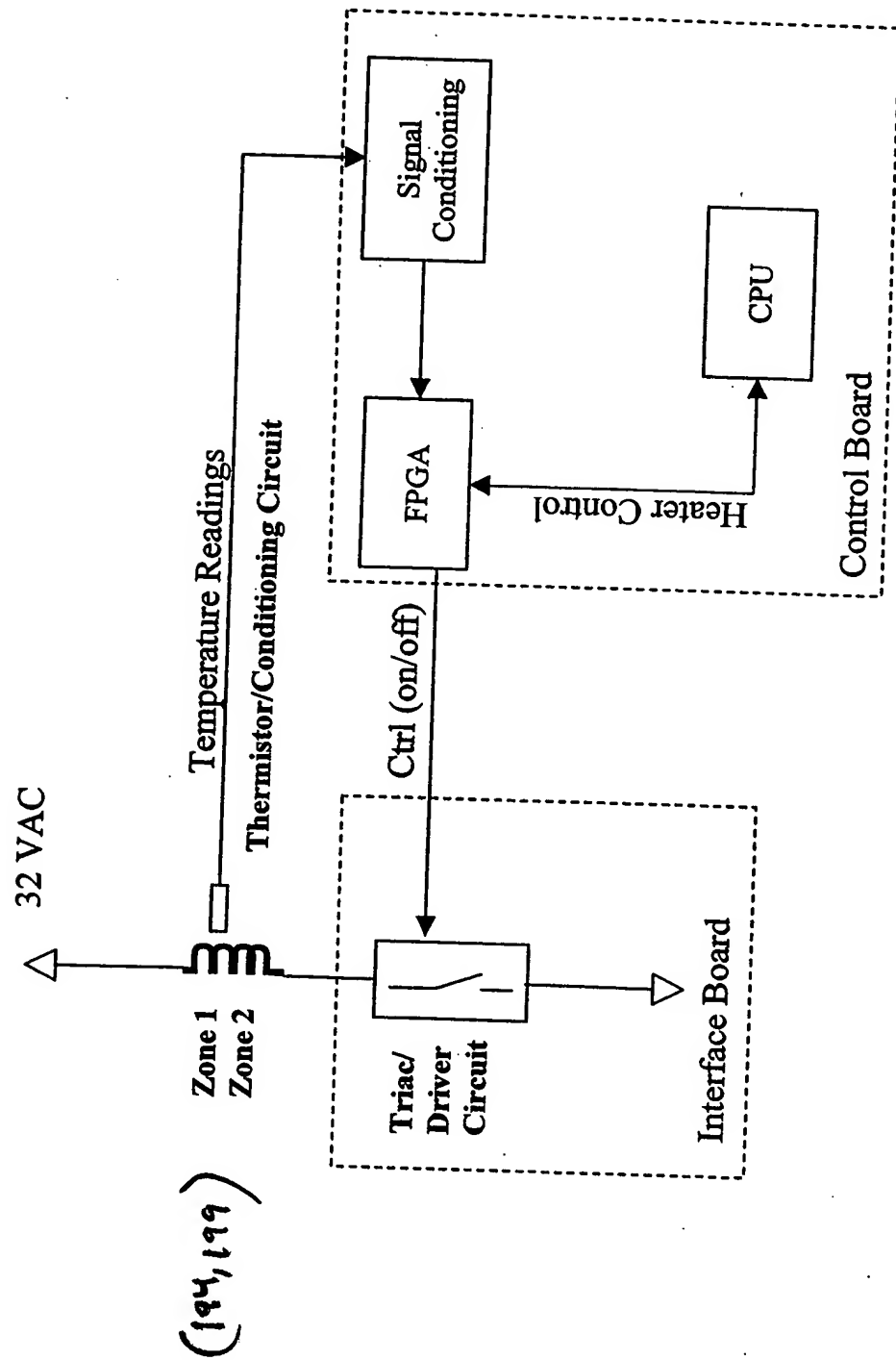


FIG. 194

Chemical Pressure

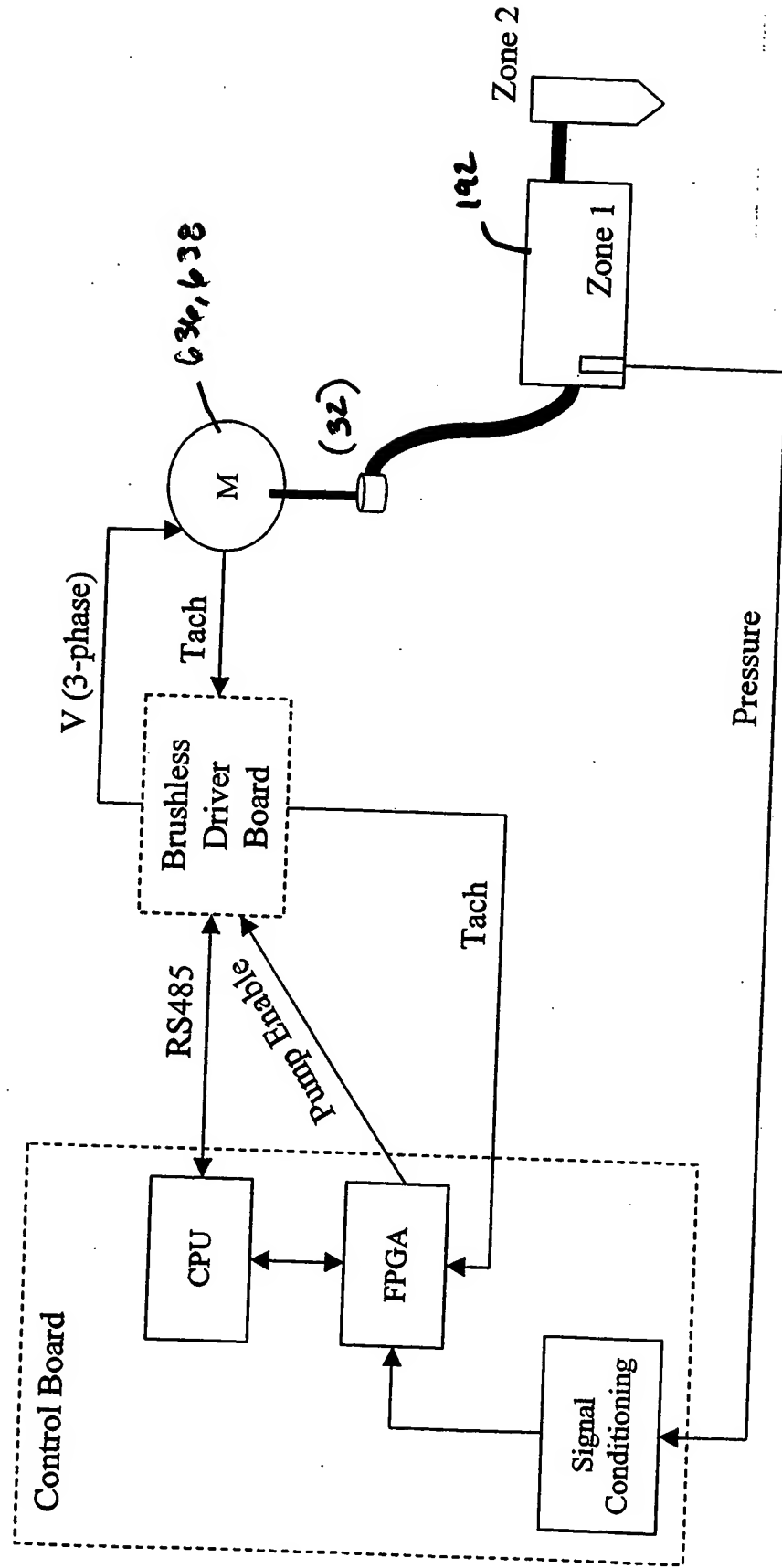


FIG. 195

Solvent System Control

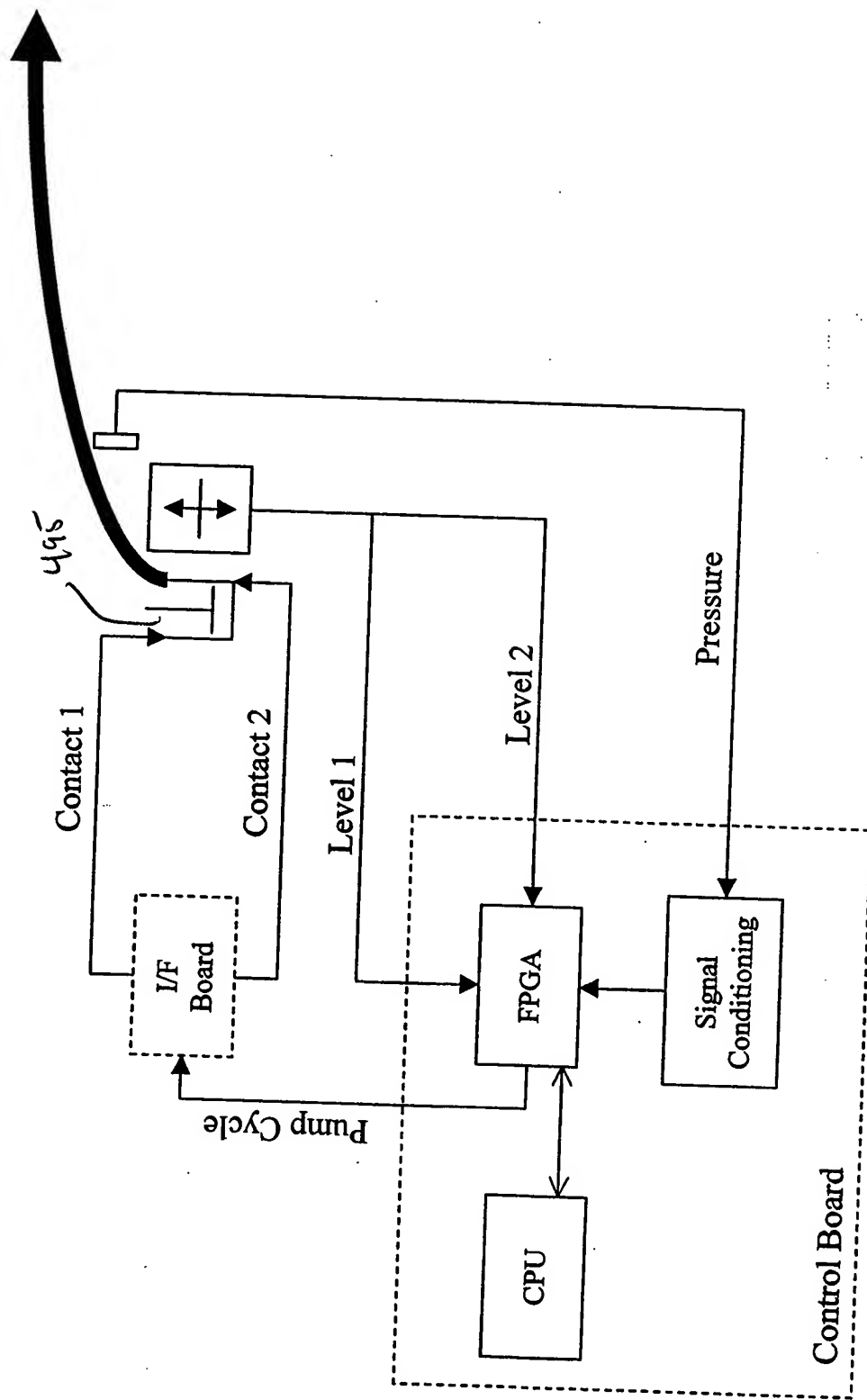
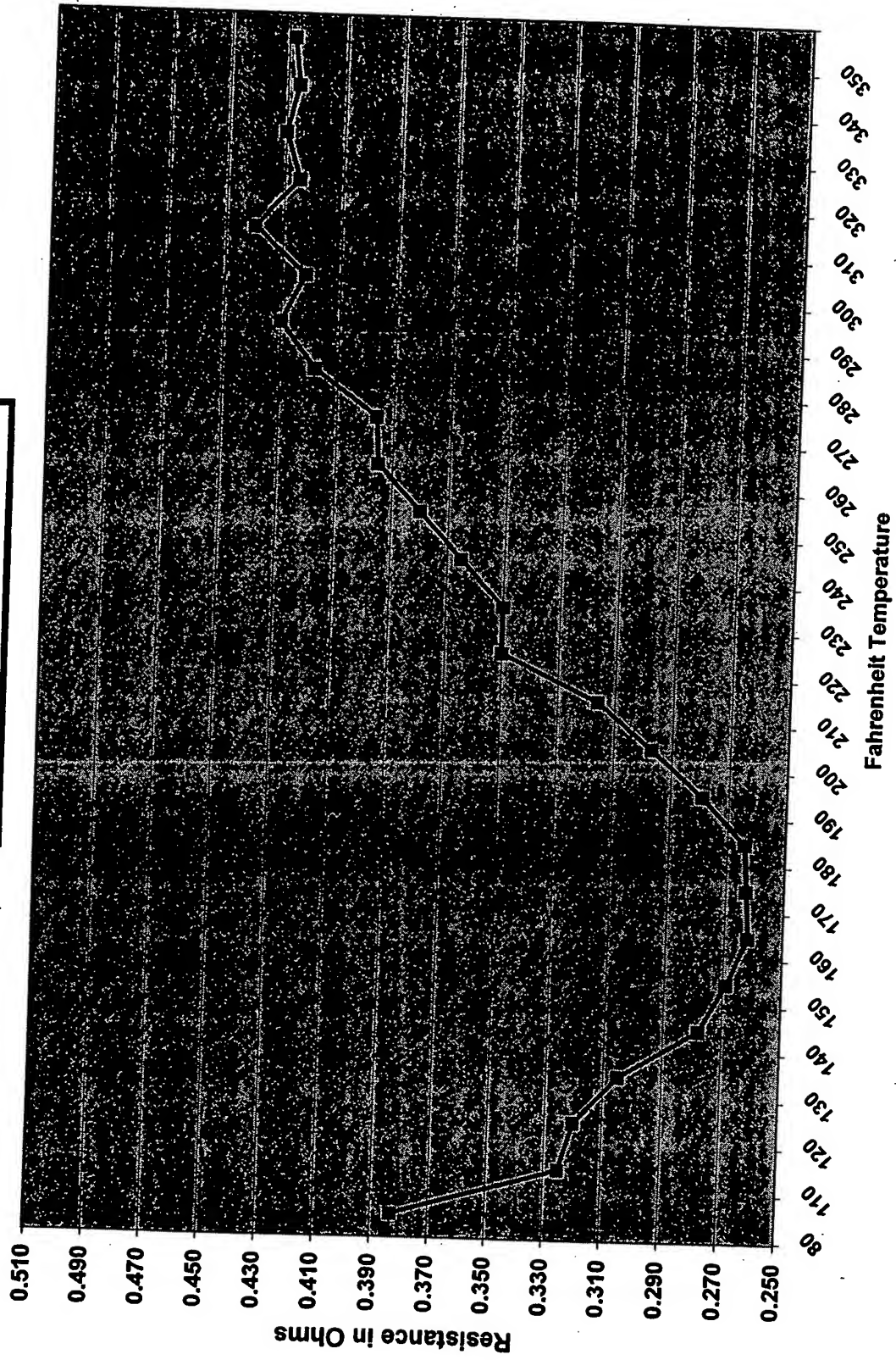


FIG. 196

FIG. 197

—■—TCR



Film Advance/Tension Motor Tach Ratio

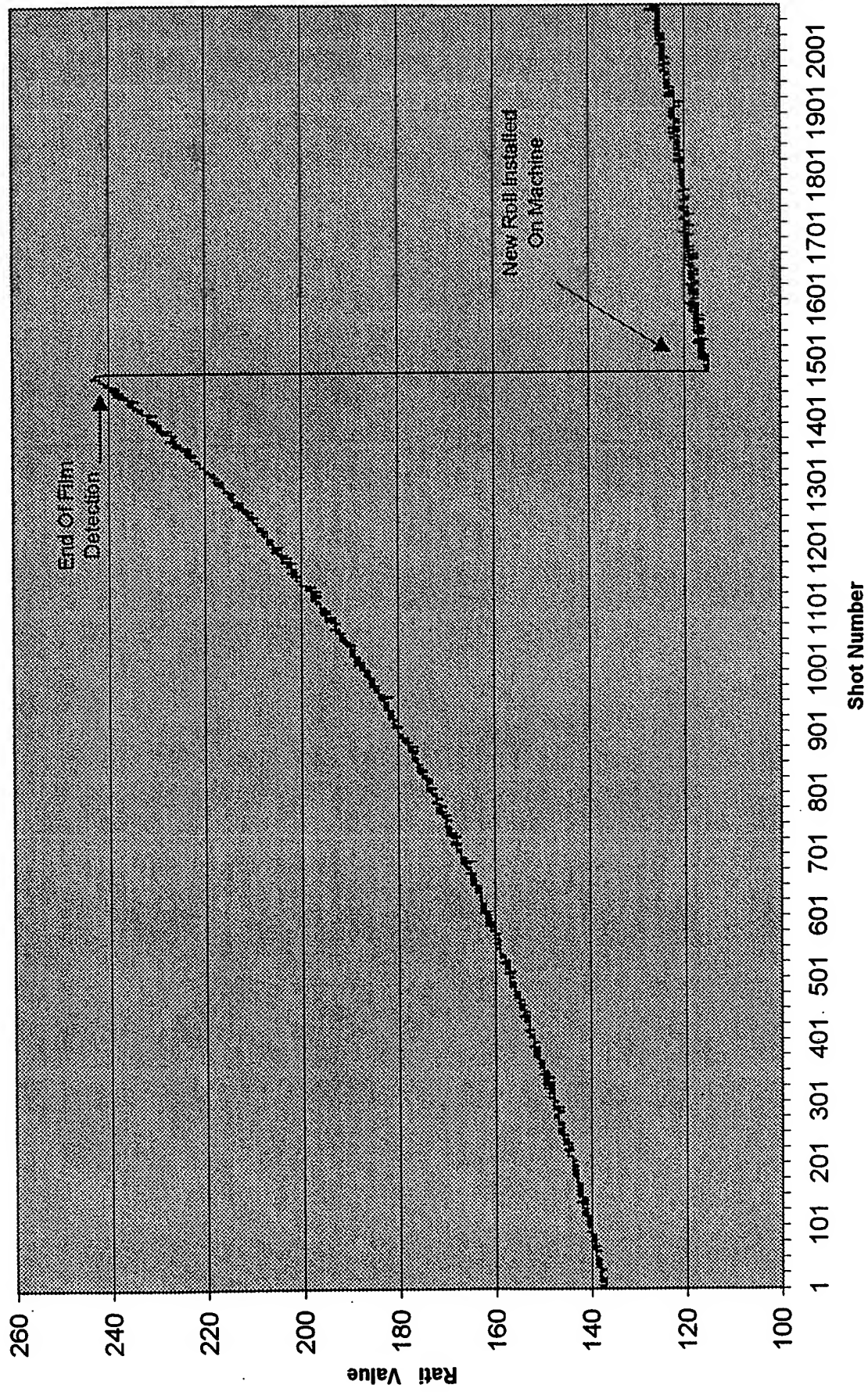


FIG. 198

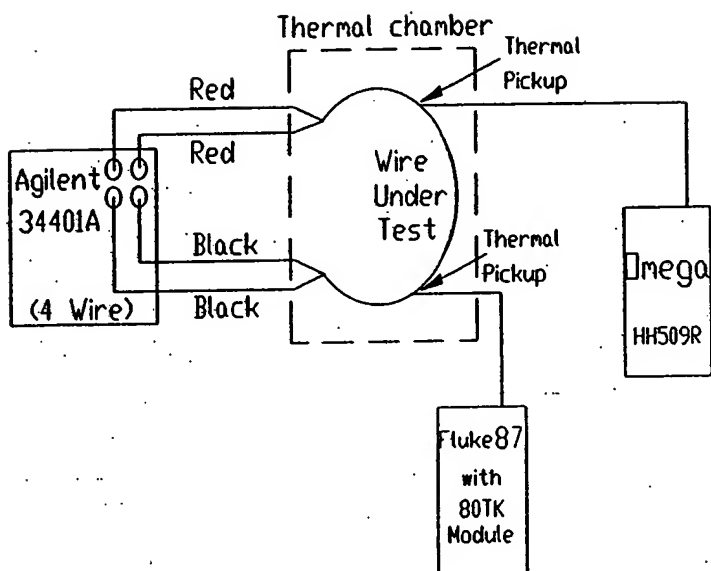


FIG. 199